

## Crops

During the projection period most major U.S. field crops receive some safety net assistance--marketing loan benefits--when prices are low, as provided by the 1996 Farm Act. Feed grains, wheat, soybeans, and cotton are projected to receive these benefits in the early years of the baseline, while rice is expected to receive benefits for the entire period. In the initial years of the projections, many crops are adjusting to a number of years of large global production combined with a rebounding international demand, before moving back to a longer-term growth trend. In the longer run, global economic growth provides for growth in trade and U.S. agricultural exports, although gains in trade are constrained by export competition and moderate growth in import demand for some important markets.

The 1996 Farm Act provides producers nearly full planting flexibility, permitting acreage responses to changes in net returns per acre. However, marketing loan benefits also enter into acreage response decisions for the baseline projections, especially during the early years of the projections. Marketing loan provisions of the 1996 Farm Act provide a minimum revenue per unit of production when market prices are below the loan rate. Consequently, these provisions affect planting decisions when market prices are near or below marketing assistance loan rates. The baseline assumes that loan rates for corn, wheat, soybeans, and upland cotton are set at their legislative maximums for the 2001/02 crop, but thereafter, are based on formulas specified in the 1996 Farm Act. Consequently, except for cotton and rice, loan rates decline in the early to mid-period of the baseline but return to their maximum levels later in the projection period.

Production flexibility contract payments decline over the first two years of the baseline period, 2001 and 2002. The remainder of the baseline assumes a constant level of payments at the 2002 level for each contract crop. Because these payments are not linked to production, they are deemed “decoupled” and considered to have minimal effects on acreage decisions.

## Land Use

Decisions on land use reflect net returns per acre in a policy environment of nearly complete planting flexibility as provided by the 1996 Farm Act. Net returns are a function of market prices supplemented by benefits from the marketing loan provisions in years of depressed prices, productivity as expressed in yields, and variable costs. Acreage changes for individual crops reflect relative net returns among competing crops as well as relative magnitudes of crop-specific acreage responses to those net returns. The acreage impact of a crop’s own net returns are partly offset by acreage impacts of competing crops’ net returns. This land-use competition is particularly strong between corn and soybeans, where the mix of plantings is quite responsive to changes in relative prices and relative program benefits. Because prices for many commodities remain below their loan rate early in the baseline, planting decisions during those years are influenced by marketing loan benefits.

Total planted area to the eight major U.S. field crops (corn, sorghum, barley, oats, wheat, rice, upland cotton, and soybeans) is expected to rise to 259 million acres in 2010 (table 9, page 62), nearly equal to the recent high level of plantings attained in 1996. Compared to 1996, fewer

acres are planted to wheat, and feed grains, while more area is devoted to soybeans and rice. Aggregate crop area declines in the early years of the baseline because of lower per-acre net returns. Although global demand for agricultural commodities is expected to improve, market prices are still recovering from relatively low levels and loan rates are assumed to decline for most crops in 2002. Starting in 2003, rising net returns contribute to an increase in aggregate planted area through the remainder of the baseline. Harvested acreage for all major crops mirrors total planted area, which generally declines in the early years of the projection period but rises thereafter.

Total feed grain area declines in the initial years of the baseline period but then increases modestly for the remainder of the period. Planted area to corn declines in the early years of the baseline, responding to continued low returns, reflecting rising input costs, an assumed declining loan rate, and recovering foreign demand. Soybean planted area begins the baseline with record plantings of 75 million acres, as marketing loan benefits are expected to support soybean net returns (and thereby acreage) that are still comparatively better than many other commodities. As corn and wheat net returns strengthen, soybean acreage is projected to decline, but begins to rise in 2005 and approaches record levels by 2010. Wheat planted area declines through 2002 as expected net returns decline with the assumed loan rate reduction, but market prices rise sufficiently to lead to additional wheat plantings thereafter. Rice area is projected to decline to 3.0 million acres. Returns per acre are not sufficient to maintain acreage at the 2000 level of 3.2 million acres because per acre variable costs rise faster than projected revenue. Planted area of upland cotton is projected to decline from 15 to 13.8 million acres in response to reduced net returns, as total use stabilizes and yields are projected to grow slightly.

The Conservation Reserve Program (CRP) is projected to achieve its maximum acreage as specified in the 1996 Farm Act by increasing from 33.8 million acres in 2001 to 36.4 million acres in 2003 and beyond (see CRP discussion, page 38 and table 8, page 43). Acreage with a planting history to wheat, corn, and soybeans accounts for about 57 percent of the CRP area throughout the baseline.

### **Crop Supply and Demand Overview**

During the first 2 to 3 years of the baseline, many of the major crops adjust to recovering market conditions. Crop area initially declines for many crops in response to low producer returns, reflecting reduced marketing loan benefits from the lower assumed commodity loan rates, large global supplies, and a recovering foreign demand with continued competition. Later in the projection period, aggregate acreage rises in response to growing world demand, accompanied by strengthening producer returns. However, with continued export competition and moderate import demand growth tempering trade for some markets, yield gains for many crops are sufficient to support much of the needed production growth, thereby mitigating some of the need to increase total land use.

The domestic market is the main component of disappearance for the major field crops. However, the export market is projected to increase in importance for many commodities. Gains in projected disappearance for wheat, cotton, and sorghum are driven by exports, with U.S. trade showing larger absolute gains and growth rates than domestic demand. Exports of corn and

soybean oil also grow at faster rates than their domestic use, but absolute increases in domestic use for these crops are larger than trade gains, reflecting the relative sizes of their utilization categories. In contrast, projected increases in consumption for barley, oats, rice, soybeans, and soybean meal are driven mainly by domestic demand. Growth in domestic consumption for these crops is larger than exports in both absolute and percentage terms. Stocks-to-use ratios decline for corn, wheat, and soybeans, with nominal prices rising.

Feed grain area declines through 2002, with yields accounting for most gains in production. Feed grain prices recover throughout the baseline period, as stock-to-use ratios are expected to decline. Although domestic use continues to grow, exports decline in the first three years of the projection period. In the later years of the baseline, feed grain plantings rise in response to higher producer returns resulting from growth in exports and steady gains in the domestic market. Larger livestock inventories boost feed use, while food, seed, and industrial (FSI) use increases mainly due to growth in corn sweetener and ethanol use. U.S. export gains are expected to be larger in the middle of the baseline period, as competitors' stocks are reduced early in the baseline but their production and competition increase later.

Less wheat area is needed in the early years of the baseline as relatively large stocks are reduced. Wheat area expands later in the baseline in response to increased net returns. Production is expected to rise beginning in the third year of the baseline aided by rising area and yields. Total consumption of U.S. wheat is projected to be fairly uniform for the first three years of the baseline but is expected to rise during the remainder of the projection period. Food use is projected to rise at 10 million bushels per year because of population growth and small increases in per capita food use of wheat products. Feed and residual use is expected to adjust downward and remain steady for most of the baseline period as wheat prices rise relative to corn and then become relatively stable. After a 3-year period of stability in the early years of the baseline period, U.S. wheat exports are expected to rise steadily over the remainder of the projection period. The U.S. is expected to face competition from the EU as the lower euro makes it possible for the EU to export wheat without subsidies throughout the projection period. U.S. exports are expected to grow at about the same pace as world wheat trade.

After rising slightly in 2001/02, area planted to rice is projected to slowly decline, as net returns are insufficient to maintain acreage levels. Annual rice production is expected to decline from 196 to 194 million hundredweight during the projection period, as the effects of contracted rice area offset small increases in yields. Steady growth in domestic use of rice is projected, driven by food use, although gains will be slower than in recent years. U.S. rice exports are expected to decline slowly throughout the baseline as rising domestic use accounts for a larger share of production. Most U.S. exports go to high-quality markets, rarely competing with the low-cost Asian exporters in lower quality rice markets. Domestic producer prices are expected to rise slowly over the next decade, as international prices recover. However, world prices are projected to remain below U.S. loan rates during the baseline, thereby making U.S. producers eligible for marketing loan benefits. Rice producers' net returns are projected to decline an average of nearly 2 percent a year, as variable costs are projected to rise faster than the sum of market revenues and marketing loan benefits.

Productivity for U.S. upland cotton is expected to nearly keep pace with growth in total use. Planted area for upland cotton is expected to fall from 15 million to 13.8 million acres during the baseline period. Acreage remains at fairly high levels in the early years of the baseline in response to cotton's favorable returns relative to other commodities but later in the period some area is bid away from cotton. Projected production ranges from 18.3 million to 17.5 million bales during the baseline period, as declines in planted area offset slight gains in yields. Total consumption is expected to rise in the early years of the baseline as global consumption expands, but then declines slightly through the end of the period. Domestic mill use declines by 7 percent over the baseline due, in part, to the full phaseout of the Multi-Fiber Arrangement's (MFA) textile and apparel import quotas scheduled for 2005. In contrast, cotton exports are expected to remain at 8 million bales for the first 4 years of the baseline and thereafter gradually increase, aided by Step 2 payments, but not completely offsetting the decline in mill use. Ending stocks of upland cotton begin to decline after the early years of the baseline and the stocks-to-use ratio declines slightly throughout most the projection period.

After 2001, lower soybean loan rates assumed in the baseline and strengthening corn and wheat prices are expected to initially reduce and then dampen increases in soybean planted area. Soybean production is expected to exceed 3.2 billion bushels on 73.8 million harvested acres by the end of the baseline. Producer prices for U.S. soybeans are projected to rise to \$6.30 a bushel by the end of the baseline as supplies come into closer balance with demand. In the early part of the baseline, lower world market prices are expected to discourage foreign soybean production and the U.S. is expected to capture a larger market share of the world soybean market. Later, as U.S. soybean prices increase, foreign soybean output is expected to curtail growth in U.S. soybean exports. Ample soybean supplies and low soybean prices accelerate domestic crushing through 2003/04, with a resurgence in foreign meal output projected to slow growth in U.S. meal exports to 9.1 million tons by 2010/11. U.S. soybean oil prices are anticipated to rise throughout the baseline as consumption converges with supply.

### **Feed Grains**

After an initial decline in 2001/02, feed grain production increases for the remainder of the projection period. Yield gains account for most of the increase in production, particularly in the early years. Corn is expected to continue increasing its share of total feed grain production and use. After declining in the initial years of the baseline, corn acres are expected to gradually increase over the remainder of the baseline period. Sorghum plantings slowly increase over the period but acreage does not return to the 1996/97 level. However, no significant turnaround in planted area for barley or oats is foreseen. Net returns of the other feed grains improve from the low levels in 1998/99, 1999/2000, or 2000/01, but continue low relative to corn through the remainder of the baseline.

Total feed grain use is projected to set a record throughout the baseline period. Exports are expected to grow about 20 percent over the baseline, a much more robust growth rate than the past two decades, and reach the old 1979 record during the later part of the baseline period. Despite improved growth in global imports, the United States is projected to face strong competition throughout the baseline.

U.S. ending stocks of feed grains are projected to drop throughout the baseline period to around 27 million metric tons. This is below the average ending stocks of the 1990s, which was 41 million tons, and much less than the average of 85.1 million of the 1980s when much higher stockholding was common due to government programs. Corn prices rise throughout the baseline as the stocks-to-use ratio declines. Without a major shock from exports, increases in productivity are expected to accommodate about 80 percent of demand growth, with the remaining increase in supply coming from increased plantings.

## **Corn**

The corn sector starts the baseline in a low but increasing price environment, reflecting an adjustment of large supplies to a growing demand. At the onset of the baseline, domestic corn use is already at record high levels, and continues growing throughout the period. For U.S. exports, the favorable impact of low prices on global demand and trade is partly offset by competition from other exporters, so a resumption of growth of U.S. corn exports is largely dependent on the U.S. corn sector remaining competitive in global markets.

Planted area for corn is projected to remain relatively large, but initially declines in response to lower net returns. Corn area is expected to increase in 2003 through the remainder of the baseline, as use strengthens and prices improve. Corn competes mostly with soybeans for land and is used extensively in rotations with soybeans. Relative net returns are expected to favor corn over soybeans for most of the baseline except 2001. Although prices for both crops are projected to be low in the next few years, the loan rate for soybeans is relatively more favorable than that of corn. Marketing loan benefits make soybeans more attractive in 2001 as a decline in total corn plantings is initially projected with an increase in soybean acres.

Strong yield gains for corn are projected to continue over the entire period, facilitated by genetic improvements and gains from farming practices, such as timely planting and effective input use. Corn production is projected to increase throughout the baseline, surpassing the previous record of 10.2 billion bushels by 2004.

Feed and residual use grows throughout the projection period, reflecting record meat production and a record number of grain-consuming animal units in the U.S. livestock sector. A steady increase in broiler production adds to generally increasing hog and cattle inventories. In addition, feed and residual use of other grains remains low relative to earlier periods.

Food, seed, and industrial (FSI) use of corn increases throughout the baseline period, beginning at a record level. Expansion for high fructose corn syrup (HFCS) and ethanol, the two largest FSI components, is projected to be smaller than in most of the previous decade, although use for ethanol is boosted in the initial years by the bioenergy program. Policies remain a critical determinant for the volume of corn used for ethanol and different policies could drastically change the use of ethanol in fuels. Food and starch, other segments of FSI use, are mature markets and projected gains reflect population growth.

Projected exports show strong growth compared with the 1980s and 1990s, but remain below the record established in 1979/80 until 2006/07. U.S. corn exports are expected to decline slightly

during the early years of the baseline, because of competing countries' exports, but begin recovering in 2004/05 and beyond.

Ending stocks of corn are expected to decline to around 860 million bushels. Prices strengthen from recent lows to \$2.60 per bushel by the end of the projection period, as the stocks-to-use ratio progressively declines.

### **Sorghum**

Sorghum production is projected to grow to 670 million bushels by 2010. This reflects an increase in plantings from 9.3 million acres to 10 million acres and trend yield growth of 0.6 bushels per year. Planted acreage is expected to increase throughout the baseline as prices and producer returns rise. By 2007, sorghum yields exceed the current record of 72.7 bushels per acre.

Since growth in both supply and demand are about equal, ending stocks of sorghum are projected to remain about the same throughout the projection period. Steady export gains are largely due to increased shipments to Mexico. Only modest increases in feed and residual use are projected. Food, seed, and industrial use rises slowly in the baseline, remaining record high due to sorghum's industrial use.

### **Barley**

Barley production increases modestly over the baseline, reaching 365 million bushels by 2010. Planted acreage remains steady over the period, as barley's net returns cannot compete for more area. Yield per acre is expected to increase 8.7 percent over the period, in line with trend increases.

In contrast to sorghum, the increase in barley supply goes to feed and residual use. Food and industrial use, dominated by malt for beer brewing, is expected to show no growth. Barley exports are projected at a relatively high 70 million bushels per year, around the maximum quantity of subsidized feed grain exports permitted under the Uruguay Round Agreement on Agriculture. Imports are expected to grow to 55 million bushels and remain constant. The average barley price is projected to rise through the baseline, reaching \$2.40 per bushel by 2010/11.

### **Oats**

The declining long-term trend in oat acreage is projected to bottom out, with oat plantings remaining constant over the baseline period. The crop will remain important in some rotations and as a cover crop. Production is projected to range from 140 to 150 million bushels over the period, while total use starts at 246 million bushels, increasing to 275 million. Imports rise from 100 million bushels to 125 million or 32 to 38 percent of supply, making up the difference between production and use. Imported oats are particularly important to food and specialty feed use. Food use grows very slowly reflecting population increases. Feed and residual use ranges

from 175 million bushels to 195 million. Oat prices begin the projection period at low levels and increase to \$1.45 per bushel by 2010/11, reflecting the rise in general level of corn prices,

### **Wheat**

Total U.S. wheat supply drops in the early years of the projections, but then increases during the rest of the baseline as gains in production outpace the decline in carryover stocks. Although supply grows during the later years of the projections, the levels achieved in 1998/99-2000/01 are not reached again in the baseline period. Wheat imports remain about 3 to 4 percent of supply.

Wheat prices for U.S. producers are projected to rise over the projection period as both rising exports and domestic food use reduce U.S. wheat stocks and the stocks-to-use ratio. The variable cost of producing wheat rises steadily throughout the period and is led by fertilizer, the largest component. However, net returns maintain a positive growth throughout most of the period as revenue outpaces variable cost.

Domestic wheat production is projected to increase steadily from 2003, after burdensome stocks decline in the early years of the baseline. Farmers are expected to respond to an increase in net returns by planting more wheat, after small declines through 2002 accompanied by an assumed reduction in the loan rate from \$2.58 to \$2.24 per bushel for 2002/03. Planted area expands to 66 million acres by 2010. Expected wheat yields rise steadily in the baseline from a starting point that is lower than actual yields in the past 3 years with the assumption of more normal weather patterns. Yields are expected to rise even faster once wheat prices exceed \$3.00 per bushel in 2003/04 and beyond.

Total wheat consumption remains relatively constant in the early years of the baseline, as gains in domestic use offset a decline in exports. Thereafter, total consumption is expected to expand for the remainder of the period due to rising food use and exports. Feed and residual use is projected to remain at 225 million bushels annually for the remainder of the period after increasing to 275 in 2001/02. Consumption of wheat for food is expected to increase 10 million bushels annually over the projection period because of population growth and small increases in per capita use of wheat products accompanied by a rise in personal income. Food use is expected to shrink as a proportion of total wheat use after 2003/04 because of a faster growth in exports.

U.S. exports are expected to grow around the same rate as the world wheat trade. The U.S. share of global trade is projected to fluctuate around 29 percent during the baseline period. Growth in global imports is mainly attributed to the rising global population. North Africa and the Middle East are key growth areas and the near-term flat U.S. exports reflect a return to normal production in those regions. China is also expected to be a growing importer of wheat. Export competition heightens as exchange rates make it possible for the EU to export wheat without subsidies throughout the projection period in competition with the United States. This exchange rate situation, together with rising U.S. wheat prices, limits growth in U.S. exports.

## Rice

U.S. rice plantings are projected to decline moderately after 2002/03, as domestic prices will not be high enough to maintain acreage at 2001/02 levels. The bulk of the contraction is expected to occur on the Gulf Coast where rice acreage has declined for more than two decades due to high costs and urban sprawl. U.S. rice acreage is projected to expand in 2001/02 due to expected favorable returns and few planting alternatives. From 1997 to 1999, U.S. rice acreage expanded to near-historic levels with the Delta accounting for the bulk of the expansion. Acreage dropped substantially in 2000, primarily in response to much lower prices.

Rice production declines from 196 million hundredweight in 2002/03 to 194 million in 2010/11, remaining well below the 1999 record of 206 million. The projected contraction in U.S. rice area offsets small but steady increases in yield. U.S. yield growth for rice is projected to be about 0.5 percent annually due to better farm management practices and some improvements in rice varieties. This growth is less than achieved in the 1980s and early 1990s when modern high-yielding varieties were being adopted.

U.S. rice imports are projected to expand about 2.5 percent annually in the baseline, reaching 13.1 million hundredweight by 2010/11, reflecting a slowdown in the rate of growth from recent years. Rice imports' share of supply is expected to rise slightly over the decade to 5.6 percent. U.S. rice imports are predominantly high quality, specialty varieties, mostly Thai jasmine as well as basmati from India and Pakistan.

Total domestic and residual use is projected to rise about 2.2 percent a year, reaching 153.1 million hundredweight by 2010/11. Food use is expected to account for virtually all of the growth in domestic use. A growing share of the U.S. population of Asian and Latin American descent, a greater emphasis on healthier life styles, and greater use of rice in processed and convenience foods account for most of the expansion in domestic food use of rice. Brewers' use of rice, which has been virtually stagnant since the late 1980s, is projected to expand only fractionally over the next decade. Brewers' use of rice is unlikely to expand due to stagnant per capita beer consumption, growing popularity of light beers that use less rice than regular beers, and larger imports of beer. Seed use, essentially a function of planted area, will slowly decline through 2010/11 as rice plantings contract.

Exports are projected to slowly decline after 2001/02 as rising domestic use accounts for a larger share of production. The export share of total use is projected to drop from 39 percent in 2000/01 to 26 percent in 2010/11. With U.S. rice production essentially steady, expanding domestic use reduces supplies available for export. U.S. prices are projected to rise faster than world prices, making U.S. rice exports less competitive in some international markets.

The United States exports mostly to high-quality markets, rarely competing with the low cost Asian exporters in lower quality milled rice markets. However, Thailand and India compete with the United States in certain high quality indica markets in the Middle East and South Africa. And China, along with Australia, competes with the U.S. for japonica sales to Japan. Australia, Egypt, and the EU also compete with the U.S. in the international japonica market. Currently, 25 to 30 percent of U.S. rice exports are rough rice, mostly going to Latin America. Asian exporters

do not export rough rice and ship very little rice to Latin America. However, both Argentina and Uruguay ship small amounts of rough rice to Latin American markets.

U.S. ending rice stocks are projected to stay near 27 million hundredweight in the baseline, and the projected stocks-to-use ratio remains about 13 percent.

International prices are expected to rise over the next decade due to expanding world rice trade and some shifting to higher quality rice. However, world prices are not projected to exceed the U.S. loan rate during the baseline period, keeping U.S. producers eligible for marketing loan benefits. Global prices are currently very low due to large exportable supplies worldwide.

Domestic rice prices are expected to rise slowly in the baseline as international prices recover. The U.S. season-average, farm-level rice price is expected to rise from a projected \$6.10 per hundredweight in 2001/02 to \$7.71 in 2010/11. Rice producers' net returns, including marketing loan benefits, are projected to decline an average of almost 2 percent a year, falling to \$143 per acre by 2010/11.

### **Upland Cotton**

Planted area for upland cotton is expected to decline from 15 million to 13.8 million acres during the baseline period. Planted area in 2001 and 2002 is expected to be 15 million acres, responding to cotton's expected favorable returns relative to other commodities. During the remaining years of the projection period, cotton acreage declines as some area is bid away to other crops. Projected area incorporates average abandonment of 8 percent per year. Upland cotton yields are expected to reach 662 pounds per harvested acre by 2010, an average yield increase of 3 pounds per year, well below the 705-pound per acre record produced in 1994. Projected production ranges from 18.3 to 17.5 million bales during the baseline period, as the decline in planted area offsets the slight rise in yields. Productivity is expected to nearly keep pace with growth in total use.

Total consumption of U.S. upland cotton in 2001/02 and 2002/03 is expected to expand modestly, as global consumption continues to expand to meet the improving demand for cotton's textile and apparel products. Total use is projected to increase to 18 million bales in 2002/03, but still remain below the historically high level of 1994/95. Total consumption is expected to decline slightly for the remainder of the projection period.

Upland mill use is expected to decline slightly throughout the baseline period as structural adjustments in the U.S. textile and apparel industry continue in preparation for the full phaseout of the MFA quotas scheduled for 2005. By 2005/06, the liberalization of restrictions on cotton's textile and apparel import quotas is likely to result in larger imports, primarily apparel, from developing countries with lower wages. Increases in cotton's textile and apparel imports are projected to more than offset larger textile and apparel exports. As a result, U.S. upland mill use is projected to decline about 1 percent per year beginning in 2005/06, declining to 9.3 million bales by the end of the baseline.

Exports of upland cotton are projected to remain flat at 8 million bales during the first several years of the baseline period. However, after 2004/05, upland exports increase slightly each year for the remainder of the period, but not completely offsetting the decline in mill use. Although world trade is projected to expand throughout the baseline period, averaging between 1 and 2 percent annually, the U.S. market share falls from nearly 30 percent in 2002/03 to about 28 percent by 2010/11. Step 2 payments--reauthorized in October 1999--are assumed to continue throughout the baseline period, aiding U.S. cotton exports.

Ending stocks are projected to rise moderately in 2001/02 and 2002/03, the highest since 1992/93, as production more than offsets expected total use. Stocks are expected to decline modestly from 4.7 million bales at the end of 2002/03 to about 4.2 million by 2010. The stocks-to-use ratio remains fairly stable during the baseline period, ranging from 24 to 26 percent. Producers' net returns for upland cotton are expected to be somewhat stable throughout the baseline period, but remain below the relatively high levels of the 1996-98 seasons.

### **Soybeans**

U.S. soybean acreage gains in 2001 reflect marketing loan benefits, which support soybean net returns and acreage, and relatively higher input costs for corn, which limit plantings of that crop somewhat. For the remainder of the baseline, soybean marketing loan benefits are lower as the loan rate is assumed to revert to the formula or minimum level set forth in the 1996 Farm Act, and soybean prices rise. Also, strengthening corn and wheat net returns are projected to limit U.S. soybean plantings through the early years of the baseline.

U.S. soybean yields are expected to regain an annual trend growth of 0.5 bushels per acre. Continued expansion of narrow-row seeding practices and improvements in soybean varieties are expected to contribute to the trend growth for U.S. yields. Growth in yields and area planted are consistent with demand growth after 2005. By 2010, soybean production is expected to exceed 3.2 billion bushels on 73.8 million harvested acres.

Despite an increase in total consumption of soybeans in 2001/02, there is a net addition to ending stocks. After falling to a low of about \$4.55 per bushel in 2001/02, prices are projected to continue below the loan rate until 2003/04. For at least the first three years of the baseline, it is expected that loan deficiency payments and marketing loan gains will supplement revenue from farm marketings. But once supplies come into closer balance with demand, U.S. soybean farm prices are projected to rise, reaching \$6.30 per bushel by the end of the baseline period. However, soybean net returns are not expected to match the 1997/98 level until about 2008/09.

U.S. soybean exports are projected to increase to a record 1.065 billion bushels by 2003/04 because of slowed foreign soybean production caused by low world market prices. Consequently, the United States is expected to capture a larger share of the world soybean market. But as domestic prices begin to firm, foreign soybean output is expected to resume growth, with the competition slowing U.S. soybean export growth in the second half of the baseline.

The pace of U.S. crush is partly determined by demand for world soybean meal and the rate of foreign crushing. Ample soybean supplies and low prices are expected to accelerate domestic crushing from 2001/02 to 2003/04. Subsequent annual increases in crushing are expected to moderate and total nearly 2 billion bushels by 2010/11, as foreign supplies increase. The average price for soybean meal is projected to decline to \$157.50 per ton in 2001/02, which should keep U.S. soybean meal exports competitive. Beginning in 2002/03, U.S. soybean meal prices are anticipated to strengthen modestly, because of a slowing growth in supply and a continuing growth in demand for domestic soybean meal (particularly spurred by rising poultry and pork production). Tightening soybean supplies and a revival in foreign meal output are projected to slow growth in U.S. meal exports in the second half of the baseline, which reach 9.1 million tons by 2010/11.

Recent soybean prices have been pressured by the lowest soybean oil values since 1971. U.S. soybean oil prices are expected to average 17.3 cents per pound in 2001/02, a modest recovery. Soybean oil prices are projected to increase throughout the baseline as consumption converges with supply, slowly reducing ending stocks. Domestic disappearance of soybean oil is expected to rise at a relatively steady rate, reaching 20 billion pounds by 2010/11. U.S. exports are projected to grow to 2.75 billion pounds by 2004/05. However, as domestic prices rise and world palm oil production continues to expand, the pace of U.S. soybean oil exports slows in the last half of the baseline.

## **Sugar**

The USDA sugar baseline assumes a continuation of current U.S. sugar policy through the end of the projections period in fiscal year 2011. The main components of the U.S. sugar program are the price support loan program and the tariff-rate quota (TRQ) import system. The loan program supports prices of domestically produced sugar. The TRQ system helps support domestic sugar prices by restricting imports of sugar. U.S. commitments under international trade agreements, including the World Trade Organization (WTO) and the North American Free Trade Agreement (NAFTA), affect the level and allocation of the TRQs throughout the baseline. NAFTA provisions also affect imports of high-tier tariff sugar outside the TRQ system.

U.S. sugar policy is carried out in the context of additional assumptions about trends that affect the production and consumption of U.S. sugar. These include assumptions about technology and the prices of crops that substitute for sugarcane and sugarbeets. In addition, factors affecting Mexican sugar supply and demand influence the U.S. sugar projections.

### **U.S. Sugar Loan Program**

**Program Administration and Minimum Prices to Avoid Forfeitures.** The 1996 Farm Act provides for the USDA to make loans available to processors of domestically grown sugarcane at a rate of 18 cents per pound and to processors of domestically grown sugarbeets at a rate of 22.9 cents per pound for refined beet sugar. To qualify for loans, processors must agree to provide payments to producers that are proportional to the value of the loan received by the processor for sugarbeets and sugarcane delivered by producers. In all years covered by the 1996 Farm Act, the loans made available to processors have been nonrecourse. With a nonrecourse loan, the USDA

must accept sugar pledged as collateral for the loan as full payment of the loan in lieu of cash repayment, at the discretion of the processor.

Although the 1996 Farm Act required that the sugar TRQ be established higher than 1.5 million short tons, raw value (STRV) as a condition for nonrecourse loans to processors, the fiscal year 2001 Agricultural Appropriations Act eliminated the TRQ trigger for nonrecourse loans and all references to recourse loans. Thus, USDA must offer nonrecourse loans for the 2002 and 2003 sugar marketing years to processors even if the TRQ is established at a level of 1.5 million STRV or less. Nonrecourse loans are assumed to continue through fiscal year 2011 for purposes of developing the USDA sugar baseline.

To forestall forfeiture, the sugar price must be high enough to cover interest expenses. Cane processors share interest expenses with their growers, but beet processors do not and must therefore recover the entire interest expense of loan repayment in their share of the sugar's selling price. Cane processors incur transportation and distribution costs in moving sugar to the refiner and also face location discounts required by some refiners. These additional costs must be included in the minimum price to avoid forfeiture calculation. Because beet sugar is refined sugar requiring no further processing, the minimum price does not include transport adjustments. However, because beet sugar is normally sold subject to a 2-percent cash discount, this amount must be added to arrive at the minimum price. Also, the 1996 Farm Act required that processors who forfeit sugar pledged as collateral for a nonrecourse loan pay a penalty of 1 cent a pound for raw cane sugar and 1.072 cents a pound for refined beet sugar. Processors consider these penalties when deciding whether to forfeit sugar to the CCC. For the sugar baseline, the minimum raw sugar market price to discourage forfeitures is calculated at 19.86 cents a pound, while the corresponding minimum refined beet sugar price is calculated at 24.78 cents a pound. These minimum prices to avoid forfeiture are assumed constant over the projections period.

**CCC Ending Sugar Stocks.** By October 2000, the Commodity Credit Corporation (CCC) held an estimated inventory of 1,090,318 STRV of sugar. This sugar was received through a USDA purchase in June (141,240 STRV) and through loan forfeitures totaling 949,078 STRV. It is assumed in the baseline that sugar paid out of CCC stocks for the Payment-In-Kind Diversion Program reduces the CCC inventory to between 810,000 to 840,000 STRV for fiscal year 2001. In the May 11, 2000 press release (No. 0159.00) announcing USDA would purchase sugar, the Secretary of Agriculture stated that CCC would not sell the sugar back into a depressed U.S. sugar market. On this basis, the USDA sugar baseline assumes that all sugar held by the CCC, including projected future acquisitions, will not be resold into the market. The baseline also assumes that inventories will accumulate because USDA has not yet specified an inventory management and disposal policy.

### **Sugar Tariff-Rate Quota**

In the Uruguay Round of the General Agreement on Tariffs and Trade (GATT), the United States agreed to import a minimum quantity of raw and refined sugar of 1.256 million STRV each marketing year (October/September). Included in this amount is a commitment to import at least 24,251 STRV of refined sugar. These commitments became binding under the World Trade Organization (WTO) when it replaced the GATT.

The raw cane sugar TRQ is allocated to 40 quota-holding countries based on a representative period (1975-81) when trade was relatively unrestricted. An additional quantity of sugar is made available to Mexico to satisfy U.S. obligations under NAFTA. The USDA sugar baseline assumes that the raw sugar TRQ less the NAFTA commitment to Mexico is set at the minimum access level of 1.231 million STRV throughout the projection period. Based on historical performance, it is assumed that some quota-holding countries will be unable to fulfill their assigned quota at an aggregate level of 65,000 STRV. In fiscal years 2001 and 2002 only, it is assumed that actual raw sugar TRQ imports will be 50,000 STRV lower due to a special program that allows Certificates for Quota Eligibility to be purchased by a U.S. refinery. (The refinery is expected to import an offsetting amount outside the TRQ, thereby leaving total U.S. sugar supply unaffected.)

The WTO minimum access for refined sugar TRQ is 24,251 STRV. It is expected that the refined sugar TRQ will be set higher than the minimum, consistent with the recent historical pattern that has allowed additional specialty sugar to be imported at a low duty within the TRQ. Therefore, the yearly refined sugar TRQ for the baseline period is assumed to be set at 41,887 STRV, the same level as for fiscal year 2001.

### **North American Free Trade Agreement**

**Low-tier Tariff NAFTA Imports.** The NAFTA went into effect on January 1, 1994. Although the original agreement contained provisions that related to trade in sugar, they were modified by the terms of a side letter in November 1993 that altered the sugar provisions of the original NAFTA text. Although Mexico has since rejected the validity of the side-letter agreement, the United States maintains that the side letter provisions supercede those of the original NAFTA.

According to the NAFTA side letter, Mexican sugar low-tier tariff exports to the United States are restricted by Mexico's "net surplus production" of sugar. The net surplus is defined as Mexico's production of sugar less its consumption of sugar and high fructose corn syrup. From fiscal year 2001 through 2007, Mexico is to have duty-free access to the U.S. market for the amount of its surplus as measured by the formula, up to a maximum of 250,000 metric tons, raw value (MTRV). Beginning in fiscal year 2008, Mexico is to have duty-free access with no quantitative limit.

The sugar baseline projects that Mexico will achieve net surplus producer status through fiscal year 2007. In general, the surplus is expected to be above 250,000 MTRV, implying that low-tier tariff imports will be set at 250,000 MTRV or 275,575 STRV. Because a portion of this amount enters as part of the WTO raw sugar minimum access (7,258 MTRV or 8,000 STRV) and the refined sugar TRQ (2,954 MTRV or 3,256 STRV), NAFTA low-tier imports are 264,000 STRV except in fiscal year 2006, when Mexico's net surplus production is projected less than 250,000 MTRV.

**High-tier Tariff NAFTA Imports.** The NAFTA specifies a declining high-tier tariff schedule for raw and refined sugar over the transition period to duty-free sugar trade in fiscal year 2008. For fiscal year 2001 the raw sugar tariff is 10.58 cents a pound, and the refined sugar tariff is

11.21 cents a pound. The raw sugar tariff drops about 1.5 cents each year, and the refined sugar tariff drops about 1.6 cents a year. Both rates reach zero in fiscal year 2008.

The economic incentive for Mexico to export high-tier tariff raw sugar exists if a price threshold is less than or equal to the U.S. sugar price. The threshold is equal to the sum of the world price of sugar (No. 11 New York contract), the high-tier NAFTA tariff rate, unit marketing costs (about 1.1 cents a pound for raw sugar), plus marketing premiums (assumed to be about \$30 a metric ton, or 1.36 cents a pound). The threshold price is compared to the U.S. price for entry in Gulf ports. This U.S. price runs about 1 cent lower than the No. 14 New York contract price. If the threshold is below the U.S. Gulf price, then Mexico would be encouraged to export sugar to the United States up to that point where the marginal returns from exporting to the U.S. and the world markets are equalized. If the return to exporting to the United States is at all levels higher than shipping to the rest-of-the-world, then Mexico ships all exportable sugar to the U.S. market.

The sugar baseline assumes that the world price of sugar will trend up through fiscal years 2001 (9 cents a pound) and 2002 (9.5 cents a pound) to a level of 10 cents a pound in 2003. This level is expected to be the average through the remainder of the baseline projections period. U.S. sugar processors are expected to use the sugar loan program to keep the U.S. raw sugar price at or above 19.86 cents a pound, with a sufficient level of loan program forfeitures (that remove sugar from the market) to keep prices from falling lower.

Under the foregoing assumptions, significant high-tier tariff imports from Mexico are expected, beginning in fiscal year 2004. Yearly imports through fiscal year 2007 are expected to be between 500,000 and 550,000 STRV. These projections are made on the assumption that Mexico will keep its countervailing duties on HFCS imports from the United States. These duties limit inroads that HFCS could otherwise make in substituting for sugar in the beverage and food processing industries. If these duties were reduced or removed completely, it is likely that high-tier sugar imports from Mexico would be much higher.

Another factor encouraging high-tier tariff imports is the U.S. sugar loan program. Under the assumptions discussed above, the CCC acquires sugar that it holds off the market in order to keep raw and refined sugar prices at the minimums necessary to forestall additional forfeitures. (In economic jargon, the CCC's stock acquisition activity is the model's equilibrating adjustment mechanism.) Because high-tier tariff imports cannot depress U.S. sugar prices below the support level, and given a world sugar price of 10 cents a pound, Mexico is encouraged to ship all exportable sugar to the United States.

After fiscal year 2007, the high-tier tariff is zero, and Mexican exports are no longer limited by calculations of net surplus production. It is expected that Mexican prices will be at parity with U.S. sugar prices, which in turn will be supported by CCC stock acquisitions. Higher Mexican prices encourage Mexican production, and encourage substitution toward HFCS because its price relative to Mexican sugar prices is now lower. In fiscal year 2011, Mexican exports to the United States are shown to be above 1.9 million STRV.

## **U.S. Sugar Production**

Trend improvements in sugarcane and sugarbeet growing, harvesting, and processing are expected to continue through the projections period. These improvements are captured in the baseline by sugar produced per acre. The sugar yield for the sugarcane States is projected at 4.34 tons per acre in fiscal year 2002, and is expected to grow yearly at about 0.06 tons per acre, reaching 4.66 tons per acre in fiscal year 2011. The U.S. sugarbeet yield is projected at 3.11 tons per acre in fiscal year 2002, and is expected to grow yearly at about 0.02 tons per acre. In fiscal year 2011, it is projected at 3.30 tons per acre.

Nominal sugar and sugar crop prices are expected to be at levels consistent with current sugar loan rates and forfeiture penalties. At these price levels, U.S. sugar production capacity is expected to remain at slightly lower levels than in 2000. Sugarcane processing capacity is expected to decrease by 2 percent, and sugarbeet processing capacity is expected to decrease by 4 percent.

Although nominal sugar crop prices are not expected to change much through the baseline, the prices of alternative crops are projected to rebound in the baseline from the very low levels of 2000. Prices for alternative crops in sugarbeet areas increase 34 percent between fiscal years 2001 and 2011, and prices for alternative crops in sugarcane areas increase 28 percent over the same period.

Declining real prices of U.S. sugar crops imply reductions in area planted and harvested. For sugarbeets, the area planted is expected to decline from 1.561 million acres in fiscal year 2001 to 1.478 million acres in fiscal year 2011, a 5.3 percent reduction. For sugarcane, the area harvested is expected to decline from 985,000 acres in fiscal year 2001 to 911,000 acres in fiscal year 2011, a 7.5 percent reduction.

U.S. sugar production is expected to be fairly constant over the projections period. For both beet and cane sugar, increases in productivity are offset by area reductions resulting from lower real sugar crop prices, so that production in fiscal year 2011 is only 1.8 percent more than in fiscal year 2002. While the U.S. sugarbeet crop is projected to increase by 400,000 tons, productivity increases imply an increase in beet sugar of 161,000 STRV. Although U.S. sugarcane production is projected to decrease by 1.6 million tons, the decrease in cane sugar production is only 4,000 STRV.

## **U.S. Sugar Consumption and Ending Stocks**

Domestic deliveries are expected to increase 135,000 STRV each year. Although this yearly increase is below the 1987-2000 average of 155,000 STRV per year, the deliveries increase will drive up calculated per capita sugar consumption from a projected 70.0 pounds in fiscal year 2001 to 73.0 pounds in fiscal year 2011, a 4.3 percent gain. Consistent with historical trend, delivery growth for industrial uses is expected to be greater than growth for non-industrial (including household) uses. Although sugar demand by industrial users may be somewhat price-elastic within certain price ranges, wholesale sugar prices are expected to be steady due to support provided by the loan program. Prices of alternative sweeteners, mainly HFCS-42 and

HFCS-55, are not expected to be sufficiently high to warrant substitution away from those products to sugar.

Ending stocks, especially those owned by the CCC, are projected to grow very significantly in the baseline. Projected ending stocks in fiscal year 2011 equal 5.2 million tons, most of which (about 77 percent) are owned by the CCC. The implied ending stocks-to-use ratio would be a record 43.7 percent.

Ending stocks are a residual category because the U.S. sugar support program prevents domestic prices from falling to levels that would balance supply and demand. Given the assumptions embedded in the baseline about U.S. sugar supply, demand, and trade policy, these projected high stock levels, along with the associated U.S. budgetary costs, represent the projected outcome of current U.S. sugar policy.

### **Tobacco**

Tobacco leaf grown in the United States is primarily used for domestic manufacture of cigarettes and for exports for cigarette production in other countries. As U.S. cigarette output has shrunk in recent years, manufacturers have needed less leaf. Furthermore, use of imported leaf has increased. Purchase intentions have plummeted, loan stocks have accumulated, and exports of leaf have declined slightly. The result has been lower marketing quotas for flue-cured and burley tobacco. In 2001, the exclusion of 1999 burley loan takings from the quota calculations will stop the plunge in burley quota. But the long-term trend towards reduced leaf use is likely to continue as cigarette consumption slides. Cigarette output is expected to continue its decline and expenses associated with litigation and settlement will push prices up. On January 1, 2001, Federal excise taxes on cigarettes will increase 5 cents per pack, putting additional pressure on prices. Cigarette manufacturers are shifting production overseas for cigarette markets in other countries, instead of producing the cigarettes domestically. In addition, greater use of imported tobacco leaf in U.S. cigarette production could compound the erosion in demand for U.S. tobacco.

Significant stocks of flue-cured and burley tobacco, along with stagnant exports and declining purchase intentions, will continue to force quotas down. Marketing quotas for flue-cured and burley are set by totaling (1) intended purchases by domestic cigarette manufacturers from the previous crop; (2) average exports for the most recent 3 marketing years; and (3) an adjustment to maintain loan stocks at the specified reserve-stock level of 15 percent of basic quota, or a minimum of 100 million pounds of flue-cured or 50 million pounds of burley. This amount may be adjusted by up or down by a maximum of 3 percent by the Secretary of Agriculture.

In the near-term, the combination of reduced manufacturer purchase intentions and high stocks will dampen quotas for flue-cured leaf, while 1999 loan forgiveness means burley will be affected mostly by lower purchase intentions. Cigarette consumption is likely to continue declining for the next decade, further eroding demand for leaf. Quotas will continue to fall. Imports are expected to remain steady for 2 years and increase annually. Export markets for both flue-cured and burley are expected to tighten as quality and competitiveness of foreign-produced tobacco gains and global cigarette consumption falls.

Tobacco yields remain constant throughout the baseline. Poundage quotas reduce incentives to raise production per acre. Prices for U.S. grown tobacco rise in correspondence with increases in the support price, which is based in part on changes in production costs.

### **Horticulture**

The farm value of U.S. horticultural production is projected to reach \$42 billion in 2001, up 5 percent from 2000 and 10 percent above 1999. Production value gains are expected in most horticultural industries, primarily resulting from increased prices. During 2000, the 5-percent increase in U.S. horticultural crop value was due mainly to increased fruit production (particularly oranges), record potato production, and higher prices for many fresh vegetables and nuts. The value of horticultural production is projected to increase \$1.2 to \$1.7 billion annually during 2002-2010, an annual growth rate of 2 to 4 percent.

Exports continue to be crucial to the success of the U.S. horticultural sector, accounting for about one-quarter of total crop value recently. On average, export sales are projected to generate 27 percent of U.S. horticultural production value during 2001-2010. The value of U.S. horticultural exports is projected to increase about 4 percent per year from fiscal year 2001 to fiscal year 2010, reaching about \$15.2 billion by the end of the baseline. However, the U.S. will remain a net importer of horticultural products, with the trade gap widening slightly. Total import value is expected to increase an average of 4 percent annually throughout the baseline, which would put import value at \$23.1 billion in 2010.

Potato production for 2000 is forecast up 5 percent from a year earlier, setting a new record. The record U.S. crop was accompanied by record Canadian potato production and strong production in Europe in the fall, 2000. As a result, U.S. potato prices are expected to be down for the 2000 crop. With a large supply of potatoes in the world, U.S. exports of potatoes and potato products may decline marginally in 2001, but are expected to recover and increase an average of 4 percent annually for 2002-2010. Domestic demand for potatoes and potato products is expected to increase by 2 percent annually from 2002-2010, while domestic production is expected to increase an average of 2 percent a year. Despite the similar projected growth rates in domestic consumption and production, exports are expected to continue to increase. Imports of frozen French fries from Canada, which have grown nearly 10-fold since 1989, are also expected to exhibit continued growth over the next decade.

Domestic demand for other fresh-market vegetables is expected to increase an average of 2.6 percent annually during 2001-2010. Per capita consumption is projected to increase about 1.8 percent a year, while annual population growth is projected at slightly less than 1 percent. Consumer awareness of the importance of fresh produce in a healthy diet, combined with increasing product diversity and availability, should help boost domestic consumption. During this 10-year period, U.S. production of fresh vegetables is expected to increase an average 2.4 percent per year. Exports should continue to increase, but will likely be outpaced by imports. Imports will continue to play an important role in the domestic supply of fresh vegetables during the winter months, and, increasingly, during other times of the year.

Fruit and nut production in 2001 is expected to increase by 1.5 percent from 2000, with most of the gain expected to occur in non-citrus fruit. For the remainder of the baseline (2001-2010), however, fruit and nut production is expected to increase an average of less than 1 percent per year. Growth in citrus production may slightly outpace growth for non-citrus fruit. On the demand side, domestic per capita consumption of fruit and nuts is expected to increase by less than 1 percent per year. Despite the relatively slow projected growth rates for domestic fruit production and consumption, trade in fruit and nuts is expected to increase. As consumers worldwide become increasingly accustomed to year-round availability of fresh produce, as well as produce not produced domestically, international trade in these products will increase. U.S. fruit and nut exports are projected to increase about 4 percent annually during 2001-2010, while imports are expected to increase 3 percent annually. The U.S. will remain a net importer of fresh fruit through 2010.

Domestic use of fruit and vegetables for processing (excluding potatoes, sweet potatoes, pulses, and mushrooms) is projected to increase during 2001-2010 by an average of less than 1 percent a year, with processed fruit consumption gaining at a slightly faster pace than processed vegetables. The processed fruit category includes juices and wine, which account for a little over 50 percent of total fruit production. Processed fruit and vegetable exports are likely to continue to increase between 4 and 6 percent annually for the next decade. Export potential for virtually all processed fruit and vegetable categories looks promising, with fruit perhaps slightly outpacing vegetables largely due to expected strong growth in wine exports.

Table 9. Planted and harvested acreage for major field crops, baseline projections

|   | 1999  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009  | 2010  |
|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| <i>Million acres</i>                    |       |       |       |       |       |       |       |       |       |       |       |       |
| <b>Planted acreage, 8 major crops</b>   |       |       |       |       |       |       |       |       |       |       |       |       |
| Corn                                    | 77.4  | 79.6  | 78.5  | 78.5  | 79.5  | 80.5  | 80.0  | 80.0  | 80.5  | 80.5  | 81.0  | 81.0  |
| Sorghum                                 | 9.3   | 9.0   | 9.3   | 9.4   | 9.5   | 9.5   | 9.5   | 9.6   | 9.7   | 9.8   | 9.9   | 10.0  |
| Barley                                  | 5.2   | 5.8   | 6.0   | 6.0   | 5.9   | 5.9   | 5.9   | 5.9   | 5.9   | 5.9   | 5.9   | 5.9   |
| Oats                                    | 4.7   | 4.5   | 4.5   | 4.5   | 4.5   | 4.5   | 4.5   | 4.5   | 4.5   | 4.5   | 4.5   | 4.5   |
| Wheat                                   | 62.7  | 62.5  | 62.0  | 61.0  | 62.5  | 63.5  | 64.5  | 64.5  | 64.5  | 65.0  | 65.5  | 66.0  |
| Rice                                    | 3.5   | 3.1   | 3.2   | 3.2   | 3.2   | 3.2   | 3.1   | 3.1   | 3.1   | 3.1   | 3.1   | 3.0   |
| Upland cotton                           | 14.6  | 15.4  | 15.0  | 15.0  | 14.5  | 14.4  | 14.3  | 14.2  | 14.1  | 14.0  | 13.9  | 13.8  |
| Soybeans                                | 73.7  | 74.5  | 75.0  | 74.0  | 73.0  | 73.0  | 73.5  | 74.0  | 74.0  | 74.3  | 74.5  | 74.8  |
| Total                                   | 251.1 | 254.4 | 253.5 | 251.6 | 252.6 | 254.5 | 255.3 | 255.8 | 256.3 | 257.0 | 258.3 | 259.0 |
| <b>Harvested acreage, 8 major crops</b> |       |       |       |       |       |       |       |       |       |       |       |       |
| Corn                                    | 70.5  | 73.0  | 71.7  | 71.7  | 72.7  | 73.7  | 73.2  | 73.2  | 73.7  | 73.7  | 74.2  | 74.2  |
| Sorghum                                 | 8.5   | 7.7   | 8.3   | 8.4   | 8.5   | 8.5   | 8.5   | 8.6   | 8.7   | 8.8   | 8.9   | 9.0   |
| Barley                                  | 4.7   | 5.2   | 5.5   | 5.5   | 5.4   | 5.4   | 5.4   | 5.4   | 5.4   | 5.4   | 5.4   | 5.4   |
| Oats                                    | 2.5   | 2.3   | 2.3   | 2.3   | 2.3   | 2.3   | 2.3   | 2.3   | 2.3   | 2.3   | 2.3   | 2.3   |
| Wheat                                   | 53.8  | 53.2  | 53.8  | 53.3  | 54.6  | 55.4  | 56.3  | 56.3  | 56.3  | 56.7  | 57.2  | 57.6  |
| Rice                                    | 3.5   | 3.1   | 3.2   | 3.2   | 3.2   | 3.1   | 3.1   | 3.1   | 3.1   | 3.1   | 3.0   | 3.0   |
| Upland cotton                           | 13.1  | 13.4  | 13.8  | 13.8  | 13.3  | 13.2  | 13.2  | 13.1  | 13.0  | 12.9  | 12.8  | 12.7  |
| Soybeans                                | 72.4  | 73.0  | 74.0  | 73.0  | 72.0  | 72.0  | 72.5  | 73.0  | 73.0  | 73.3  | 73.5  | 73.8  |
| Total                                   | 229.0 | 230.9 | 232.6 | 231.2 | 232.0 | 233.6 | 234.5 | 235.0 | 235.5 | 236.1 | 237.3 | 238.0 |

Table 10. Selected supply, use, and price variables for major field crops, baseline projections

|                                    | 1999/2000 | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 |
|------------------------------------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| <b>Yields <sup>1/</sup></b>        |           |         |         |         |         |         |         |         |         |         |         |         |
| Corn                               | 133.8     | 139.6   | 136.1   | 137.8   | 139.5   | 141.2   | 142.9   | 144.6   | 146.3   | 148.0   | 149.7   | 151.4   |
| Sorghum                            | 69.7      | 60.7    | 69.3    | 69.9    | 70.5    | 71.1    | 71.7    | 72.3    | 72.9    | 73.5    | 74.1    | 74.7    |
| Barley                             | 59.2      | 61.4    | 61.9    | 62.5    | 63.1    | 63.7    | 64.3    | 64.9    | 65.5    | 66.1    | 66.7    | 67.3    |
| Oats                               | 59.6      | 64.4    | 60.6    | 61.0    | 61.4    | 61.8    | 62.2    | 62.6    | 63.0    | 63.4    | 63.8    | 64.2    |
| Wheat                              | 42.7      | 42.1    | 40.8    | 41.1    | 41.4    | 41.8    | 42.2    | 42.6    | 43.0    | 43.4    | 43.8    | 44.2    |
| Rice                               | 5,866     | 6,230   | 6,150   | 6,181   | 6,213   | 6,246   | 6,279   | 6,312   | 6,345   | 6,381   | 6,415   | 6,449   |
| Upland cotton                      | 595       | 613     | 635     | 638     | 641     | 644     | 647     | 650     | 653     | 656     | 659     | 662     |
| Soybeans                           | 36.6      | 38.7    | 39.5    | 40.0    | 40.5    | 41.0    | 41.5    | 42.0    | 42.5    | 43.0    | 43.5    | 44.0    |
| <b>Production <sup>2/</sup></b>    |           |         |         |         |         |         |         |         |         |         |         |         |
| Corn                               | 9,437     | 10,192  | 9,760   | 9,880   | 10,140  | 10,405  | 10,460  | 10,585  | 10,780  | 10,910  | 11,110  | 11,235  |
| Sorghum                            | 595       | 465     | 575     | 585     | 600     | 605     | 610     | 620     | 635     | 645     | 660     | 670     |
| Barley                             | 280       | 320     | 340     | 345     | 340     | 345     | 345     | 350     | 355     | 355     | 360     | 365     |
| Oats                               | 146       | 150     | 140     | 140     | 140     | 140     | 145     | 145     | 145     | 145     | 145     | 150     |
| Wheat                              | 2,299     | 2,239   | 2,195   | 2,190   | 2,260   | 2,315   | 2,375   | 2,400   | 2,420   | 2,460   | 2,505   | 2,545   |
| Rice                               | 206.0     | 192.2   | 195.2   | 196.2   | 196.3   | 196.1   | 195.9   | 196.0   | 196.1   | 194.6   | 194.1   | 194.2   |
| Upland cotton                      | 16,294    | 17,079  | 18,300  | 18,300  | 17,800  | 17,700  | 17,800  | 17,700  | 17,700  | 17,600  | 17,600  | 17,500  |
| Soybeans                           | 2,654     | 2,823   | 2,925   | 2,920   | 2,915   | 2,950   | 3,010   | 3,065   | 3,105   | 3,150   | 3,195   | 3,245   |
| <b>Exports <sup>2/</sup></b>       |           |         |         |         |         |         |         |         |         |         |         |         |
| Corn                               | 1,935     | 2,275   | 2,250   | 2,225   | 2,225   | 2,275   | 2,325   | 2,400   | 2,475   | 2,550   | 2,600   | 2,675   |
| Sorghum                            | 250       | 200     | 255     | 260     | 260     | 260     | 265     | 270     | 280     | 290     | 300     | 315     |
| Barley                             | 30        | 35      | 70      | 70      | 70      | 70      | 70      | 70      | 70      | 70      | 70      | 70      |
| Oats                               | 2         | 2       | 2       | 2       | 2       | 2       | 2       | 2       | 2       | 2       | 2       | 2       |
| Wheat                              | 1,090     | 1,125   | 1,100   | 1,125   | 1,125   | 1,150   | 1,175   | 1,200   | 1,225   | 1,250   | 1,300   | 1,325   |
| Rice                               | 88.0      | 80.0    | 80.0    | 78.0    | 76.0    | 73.0    | 70.0    | 68.0    | 65.0    | 60.5    | 57.0    | 54.5    |
| Upland cotton                      | 6,303     | 7,125   | 7,700   | 8,000   | 8,000   | 8,000   | 8,050   | 8,100   | 8,150   | 8,200   | 8,250   | 8,300   |
| Soybeans                           | 973       | 965     | 1,010   | 1,040   | 1,065   | 1,060   | 1,050   | 1,045   | 1,050   | 1,055   | 1,060   | 1,070   |
| Soybean meal                       | 7,325     | 7,250   | 7,650   | 8,100   | 8,400   | 8,450   | 8,550   | 8,650   | 8,750   | 8,850   | 8,950   | 9,050   |
| <b>Ending stocks <sup>2/</sup></b> |           |         |         |         |         |         |         |         |         |         |         |         |
| Corn                               | 1,715     | 1,817   | 1,447   | 1,187   | 1,102   | 1,142   | 1,102   | 1,022   | 992     | 927     | 917     | 867     |
| Sorghum                            | 65        | 51      | 56      | 61      | 71      | 76      | 76      | 76      | 76      | 71      | 71      | 66      |
| Barley                             | 111       | 105     | 103     | 111     | 114     | 117     | 115     | 113     | 111     | 109     | 107     | 110     |
| Oats                               | 76        | 76      | 70      | 68      | 65      | 61      | 61      | 60      | 58      | 55      | 56      | 56      |
| Wheat                              | 950       | 888     | 775     | 675     | 638     | 625     | 637     | 639     | 625     | 616     | 591     | 570     |
| Rice                               | 27.5      | 27.1    | 27.0    | 27.3    | 27.3    | 27.4    | 27.6    | 27.2    | 27.1    | 27.1    | 27.2    | 26.9    |
| Upland cotton                      | 3,672     | 3,729   | 4,349   | 4,719   | 4,639   | 4,509   | 4,479   | 4,399   | 4,369   | 4,289   | 4,259   | 4,179   |
| Soybeans                           | 288       | 365     | 460     | 455     | 380     | 310     | 270     | 255     | 240     | 230     | 225     | 225     |
| <b>Prices <sup>3/</sup></b>        |           |         |         |         |         |         |         |         |         |         |         |         |
| Corn                               | 1.80      | 1.85    | 2.00    | 2.15    | 2.20    | 2.20    | 2.25    | 2.35    | 2.40    | 2.50    | 2.55    | 2.60    |
| Sorghum                            | 1.55      | 1.65    | 1.75    | 1.85    | 1.90    | 1.90    | 1.95    | 2.05    | 2.10    | 2.20    | 2.30    | 2.35    |
| Barley                             | 2.13      | 2.25    | 2.10    | 2.15    | 2.20    | 2.20    | 2.25    | 2.25    | 2.30    | 2.35    | 2.40    | 2.40    |
| Oats                               | 1.12      | 1.15    | 1.10    | 1.15    | 1.20    | 1.25    | 1.30    | 1.35    | 1.40    | 1.45    | 1.45    | 1.45    |
| Wheat                              | 2.48      | 2.55    | 2.70    | 2.95    | 3.10    | 3.20    | 3.20    | 3.25    | 3.35    | 3.45    | 3.60    | 3.70    |
| Rice                               | 6.11      | 6.00    | 6.10    | 6.27    | 6.45    | 6.62    | 6.79    | 6.99    | 7.17    | 7.34    | 7.51    | 7.71    |
| Soybeans                           | 4.65      | 4.90    | 4.55    | 4.65    | 4.95    | 5.25    | 5.60    | 5.80    | 5.95    | 6.15    | 6.25    | 6.30    |
| Soybean oil                        | 0.156     | 0.165   | 0.173   | 0.183   | 0.195   | 0.210   | 0.225   | 0.235   | 0.243   | 0.250   | 0.255   | 0.260   |
| Soybean meal                       | 167.0     | 172.5   | 157.5   | 157.0   | 162.5   | 166.5   | 173.5   | 176.5   | 178.5   | 183.5   | 183.5   | 182.5   |

1/ Bushels per acre except for upland cotton and rice (pounds per acre).

2/ Million bushels except for upland cotton (thousand bales), rice (million hundredweight), and soybean meal (thousand tons).

3/ Dollars per bushel except for soybean oil (per pound), rice (per hundredweight), and soybean meal (per ton).

Table 11. Corn baseline

| Item  | 1999/2000 | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 |
|---|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Acreage (million acres):                        |           |         |         |         |         |         |         |         |         |         |         |         |
| CRP acres:                                      |           |         |         |         |         |         |         |         |         |         |         |         |
| Cropping history 1/                             | 5.2       | 5.5     | 6.0     | 6.1     | 6.4     | 6.4     | 6.4     | 6.4     | 6.4     | 6.4     | 6.4     | 6.4     |
| Planted acres                                   | 77.4      | 79.6    | 78.5    | 78.5    | 79.5    | 80.5    | 80.0    | 80.0    | 80.5    | 80.5    | 81.0    | 81.0    |
| Harvested acres                                 | 70.5      | 73.0    | 71.7    | 71.7    | 72.7    | 73.7    | 73.2    | 73.2    | 73.7    | 73.7    | 74.2    | 74.2    |
| Yields (bushels per acre):                      |           |         |         |         |         |         |         |         |         |         |         |         |
| Yield/harvested acre                            | 133.8     | 139.6   | 136.1   | 137.8   | 139.5   | 141.2   | 142.9   | 144.6   | 146.3   | 148.0   | 149.7   | 151.4   |
| Supply and use (million bushels):               |           |         |         |         |         |         |         |         |         |         |         |         |
| Beginning stocks                                | 1,787     | 1,715   | 1,817   | 1,447   | 1,187   | 1,102   | 1,142   | 1,102   | 1,022   | 992     | 927     | 917     |
| Production                                      | 9,437     | 10,192  | 9,760   | 9,880   | 10,140  | 10,405  | 10,460  | 10,585  | 10,780  | 10,910  | 11,110  | 11,235  |
| Imports   | 15        | 10      | 10      | 10      | 10      | 10      | 10      | 10      | 10      | 10      | 10      | 10      |
| Supply  | 11,239    | 11,917  | 11,587  | 11,337  | 11,337  | 11,517  | 11,612  | 11,697  | 11,812  | 11,912  | 12,047  | 12,162  |
| Feed & residual                                 | 5,676     | 5,850   | 5,850   | 5,850   | 5,900   | 5,950   | 6,000   | 6,050   | 6,075   | 6,125   | 6,175   | 6,225   |
| Food, seed, & industrial                        | 1,913     | 1,975   | 2,040   | 2,075   | 2,110   | 2,150   | 2,185   | 2,225   | 2,270   | 2,310   | 2,355   | 2,395   |
| Domestic  | 7,589     | 7,825   | 7,890   | 7,925   | 8,010   | 8,100   | 8,185   | 8,275   | 8,345   | 8,435   | 8,530   | 8,620   |
| Exports   | 1,935     | 2,275   | 2,250   | 2,225   | 2,225   | 2,275   | 2,325   | 2,400   | 2,475   | 2,550   | 2,600   | 2,675   |
| Total use                                       | 9,524     | 10,100  | 10,140  | 10,150  | 10,235  | 10,375  | 10,510  | 10,675  | 10,820  | 10,985  | 11,130  | 11,295  |
| Ending stocks                                   | 1,715     | 1,817   | 1,447   | 1,187   | 1,102   | 1,142   | 1,102   | 1,022   | 992     | 927     | 917     | 867     |
| Stocks/use ratio, percent                       | 18.0      | 18.0    | 14.3    | 11.7    | 10.8    | 11.0    | 10.5    | 9.6     | 9.2     | 8.4     | 8.2     | 7.7     |
| Prices (dollars per bushel):                    |           |         |         |         |         |         |         |         |         |         |         |         |
| Farm price                                      | 1.80      | 1.85    | 2.00    | 2.15    | 2.20    | 2.20    | 2.25    | 2.35    | 2.40    | 2.50    | 2.55    | 2.60    |
| Loan rate                                       | 1.89      | 1.89    | 1.89    | 1.64    | 1.64    | 1.70    | 1.80    | 1.85    | 1.89    | 1.89    | 1.89    | 1.89    |
| Variable costs of production (dollars):         |           |         |         |         |         |         |         |         |         |         |         |         |
| Per acre  | 153.27    | 158.35  | 160.49  | 161.82  | 164.01  | 166.51  | 169.03  | 171.71  | 174.58  | 177.70  | 181.11  | 184.73  |
| Per bushel                                      | 1.15      | 1.13    | 1.18    | 1.17    | 1.18    | 1.18    | 1.18    | 1.19    | 1.19    | 1.20    | 1.21    | 1.22    |
| Returns over variable costs (dollars per acre): |           |         |         |         |         |         |         |         |         |         |         |         |
| Net returns 2/                                  | 122.36    | 133.41  | 123.96  | 134.45  | 142.89  | 144.13  | 152.50  | 168.10  | 176.54  | 192.30  | 200.63  | 208.91  |

1/ The cropping history allocation is based on 1998 plantings on farms with CRP acreage, and is used as a general indicator influencing land available for plantings.

2/ Net returns include estimates of marketing loan benefits.

Table 12. Sorghum baseline

| Item  | 1999/2000 | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 |
|---|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Acreage (million acres):                        |           |         |         |         |         |         |         |         |         |         |         |         |
| CRP acres:                                      |           |         |         |         |         |         |         |         |         |         |         |         |
| Cropping history 1/                             | 1.2       | 1.3     | 1.4     | 1.4     | 1.5     | 1.5     | 1.5     | 1.5     | 1.5     | 1.5     | 1.5     | 1.5     |
| Planted acres                                   | 9.3       | 9.0     | 9.3     | 9.4     | 9.5     | 9.5     | 9.5     | 9.6     | 9.7     | 9.8     | 9.9     | 10.0    |
| Harvested acres                                 | 8.5       | 7.7     | 8.3     | 8.4     | 8.5     | 8.5     | 8.5     | 8.6     | 8.7     | 8.8     | 8.9     | 9.0     |
| Yields (bushels per acre):                      |           |         |         |         |         |         |         |         |         |         |         |         |
| Yield/harvested acre                            | 69.7      | 60.7    | 69.3    | 69.9    | 70.5    | 71.1    | 71.7    | 72.3    | 72.9    | 73.5    | 74.1    | 74.7    |
| Supply and use (million bushels):               |           |         |         |         |         |         |         |         |         |         |         |         |
| Beginning stocks                                | 65        | 65      | 51      | 56      | 61      | 71      | 76      | 76      | 76      | 76      | 71      | 71      |
| Production                                      | 595       | 465     | 575     | 585     | 600     | 605     | 610     | 620     | 635     | 645     | 660     | 670     |
| Imports   | 0         | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       |
| Supply  | 660       | 531     | 626     | 641     | 661     | 676     | 686     | 696     | 711     | 721     | 731     | 741     |
| Feed & residual                                 | 290       | 230     | 255     | 255     | 265     | 270     | 275     | 275     | 280     | 280     | 280     | 280     |
| Food, seed, & industrial                        | 55        | 50      | 60      | 65      | 65      | 70      | 70      | 75      | 75      | 80      | 80      | 80      |
| Domestic  | 345       | 280     | 315     | 320     | 330     | 340     | 345     | 350     | 355     | 360     | 360     | 360     |
| Exports   | 250       | 200     | 255     | 260     | 260     | 260     | 265     | 270     | 280     | 290     | 300     | 315     |
| Total use                                       | 595       | 480     | 570     | 580     | 590     | 600     | 610     | 620     | 635     | 650     | 660     | 675     |
| Ending stocks                                   | 65        | 51      | 56      | 61      | 71      | 76      | 76      | 76      | 76      | 71      | 71      | 66      |
| Stocks/use ratio, percent                       | 10.9      | 10.6    | 9.8     | 10.5    | 12.0    | 12.7    | 12.5    | 12.3    | 12.0    | 10.9    | 10.8    | 9.8     |
| Prices (dollars per bushel):                    |           |         |         |         |         |         |         |         |         |         |         |         |
| Farm price                                      | 1.55      | 1.65    | 1.75    | 1.85    | 1.90    | 1.90    | 1.95    | 2.05    | 2.10    | 2.20    | 2.30    | 2.35    |
| Loan rate                                       | 1.74      | 1.71    | 1.71    | 1.44    | 1.42    | 1.48    | 1.57    | 1.60    | 1.64    | 1.64    | 1.65    | 1.66    |
| Variable costs of production (dollars):         |           |         |         |         |         |         |         |         |         |         |         |         |
| Per acre  | 81.57     | 85.87   | 86.95   | 87.36   | 88.49   | 89.81   | 91.15   | 92.57   | 94.05   | 95.62   | 97.29   | 99.04   |
| Per bushel                                      | 1.17      | 1.41    | 1.25    | 1.25    | 1.26    | 1.26    | 1.27    | 1.28    | 1.29    | 1.30    | 1.31    | 1.33    |
| Returns over variable costs (dollars per acre): |           |         |         |         |         |         |         |         |         |         |         |         |
| Net returns 2/                                  | 44.59     | 24.00   | 38.49   | 41.96   | 45.46   | 45.28   | 48.66   | 55.65   | 59.04   | 66.08   | 73.14   | 76.51   |

1/ The cropping history allocation is based on 1998 plantings on farms with CRP acreage, and is used as a general indicator influencing land available for plantings.

2/ Net returns include estimates of marketing loan benefits.

Table 13. Barley baseline

| Item  | 1999/2000 | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 |
|---|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Acreage (million acres):                        |           |         |         |         |         |         |         |         |         |         |         |         |
| CRP acres:                                      |           |         |         |         |         |         |         |         |         |         |         |         |
| Cropping history 1/                             | 0.7       | 0.7     | 0.8     | 0.8     | 0.8     | 0.8     | 0.8     | 0.8     | 0.8     | 0.8     | 0.8     | 0.8     |
| Planted acres                                   | 5.2       | 5.8     | 6.0     | 6.0     | 5.9     | 5.9     | 5.9     | 5.9     | 5.9     | 5.9     | 5.9     | 5.9     |
| Harvested acres                                 | 4.7       | 5.2     | 5.5     | 5.5     | 5.4     | 5.4     | 5.4     | 5.4     | 5.4     | 5.4     | 5.4     | 5.4     |
| Yields (bushels per acre):                      |           |         |         |         |         |         |         |         |         |         |         |         |
| Yield/harvested acre                            | 59.2      | 61.4    | 61.9    | 62.5    | 63.1    | 63.7    | 64.3    | 64.9    | 65.5    | 66.1    | 66.7    | 67.3    |
| Supply and use (million bushels):               |           |         |         |         |         |         |         |         |         |         |         |         |
| Beginning stocks                                | 142       | 111     | 105     | 103     | 111     | 114     | 117     | 115     | 113     | 111     | 109     | 107     |
| Production                                      | 280       | 320     | 340     | 345     | 340     | 345     | 345     | 350     | 355     | 355     | 360     | 365     |
| Imports   | 28        | 30      | 40      | 50      | 55      | 55      | 55      | 55      | 55      | 55      | 55      | 55      |
| Supply  | 449       | 462     | 485     | 498     | 506     | 514     | 517     | 520     | 523     | 521     | 524     | 527     |
| Feed & residual                                 | 136       | 150     | 140     | 145     | 150     | 155     | 160     | 165     | 170     | 170     | 175     | 175     |
| Food, seed, & industrial                        | 172       | 172     | 172     | 172     | 172     | 172     | 172     | 172     | 172     | 172     | 172     | 172     |
| Domestic  | 308       | 322     | 312     | 317     | 322     | 327     | 332     | 337     | 342     | 342     | 347     | 347     |
| Exports   | 30        | 35      | 70      | 70      | 70      | 70      | 70      | 70      | 70      | 70      | 70      | 70      |
| Total use                                       | 338       | 357     | 382     | 387     | 392     | 397     | 402     | 407     | 412     | 412     | 417     | 417     |
| Ending stocks                                   | 111       | 105     | 103     | 111     | 114     | 117     | 115     | 113     | 111     | 109     | 107     | 110     |
| Stocks/use ratio, percent                       | 32.8      | 29.4    | 27.0    | 28.7    | 29.1    | 29.5    | 28.6    | 27.8    | 26.9    | 26.5    | 25.7    | 26.4    |
| Prices (dollars per bushel):                    |           |         |         |         |         |         |         |         |         |         |         |         |
| Farm price                                      | 2.13      | 2.25    | 2.10    | 2.15    | 2.20    | 2.20    | 2.25    | 2.25    | 2.30    | 2.35    | 2.40    | 2.40    |
| Loan rate                                       | 1.59      | 1.62    | 1.65    | 1.40    | 1.40    | 1.47    | 1.53    | 1.56    | 1.58    | 1.58    | 1.58    | 1.57    |
| Variable costs of production (dollars):         |           |         |         |         |         |         |         |         |         |         |         |         |
| Per acre  | 79.10     | 82.15   | 83.35   | 84.00   | 85.20   | 86.55   | 87.92   | 89.35   | 90.87   | 92.47   | 94.19   | 96.01   |
| Per bushel                                      | 1.34      | 1.34    | 1.35    | 1.34    | 1.35    | 1.36    | 1.37    | 1.38    | 1.39    | 1.40    | 1.41    | 1.43    |
| Returns over variable costs (dollars per acre): |           |         |         |         |         |         |         |         |         |         |         |         |
| Net returns 2/                                  | 55.28     | 60.30   | 62.11   | 50.37   | 53.62   | 53.59   | 56.76   | 57.32   | 59.78   | 62.87   | 65.89   | 65.51   |

1/ The cropping history allocation is based on 1998 plantings on farms with CRP acreage, and is used as a general indicator influencing land available for plantings.

2/ Net returns include estimates of marketing loan benefits.

Table 14. Oats baseline

| Item  | 1999/2000 | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 |
|---|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Acreage (million acres):                        |           |         |         |         |         |         |         |         |         |         |         |         |
| CRP acres:                                      |           |         |         |         |         |         |         |         |         |         |         |         |
| Cropping history 1/                             | 0.4       | 0.4     | 0.4     | 0.4     | 0.4     | 0.4     | 0.4     | 0.4     | 0.4     | 0.4     | 0.4     | 0.4     |
| Planted acres                                   | 4.7       | 4.5     | 4.5     | 4.5     | 4.5     | 4.5     | 4.5     | 4.5     | 4.5     | 4.5     | 4.5     | 4.5     |
| Harvested acres                                 | 2.5       | 2.3     | 2.3     | 2.3     | 2.3     | 2.3     | 2.3     | 2.3     | 2.3     | 2.3     | 2.3     | 2.3     |
| Yields (bushels per acre):                      |           |         |         |         |         |         |         |         |         |         |         |         |
| Yield/harvested acre                            | 59.6      | 64.4    | 60.6    | 61.0    | 61.4    | 61.8    | 62.2    | 62.6    | 63.0    | 63.4    | 63.8    | 64.2    |
| Supply and use (million bushels):               |           |         |         |         |         |         |         |         |         |         |         |         |
| Beginning stocks                                | 81        | 76      | 76      | 70      | 68      | 65      | 61      | 61      | 60      | 58      | 55      | 56      |
| Production                                      | 146       | 150     | 140     | 140     | 140     | 140     | 145     | 145     | 145     | 145     | 145     | 150     |
| Imports   | 99        | 100     | 100     | 105     | 110     | 110     | 115     | 115     | 120     | 120     | 125     | 125     |
| Supply  | 326       | 326     | 316     | 315     | 318     | 315     | 321     | 321     | 325     | 323     | 325     | 331     |
| Feed & residual                                 | 180       | 180     | 175     | 175     | 180     | 180     | 185     | 185     | 190     | 190     | 190     | 195     |
| Food, seed, & industrial                        | 68        | 68      | 69      | 70      | 71      | 72      | 73      | 74      | 75      | 76      | 77      | 78      |
| Domestic  | 249       | 248     | 244     | 245     | 251     | 252     | 258     | 259     | 265     | 266     | 267     | 273     |
| Exports   | 2         | 2       | 2       | 2       | 2       | 2       | 2       | 2       | 2       | 2       | 2       | 2       |
| Total use                                       | 250       | 250     | 246     | 247     | 253     | 254     | 260     | 261     | 267     | 268     | 269     | 275     |
| Ending stocks                                   | 76        | 76      | 70      | 68      | 65      | 61      | 61      | 60      | 58      | 55      | 56      | 56      |
| Stocks/use ratio, percent                       | 30.4      | 30.4    | 28.5    | 27.5    | 25.7    | 24.0    | 23.5    | 23.0    | 21.7    | 20.5    | 20.8    | 20.4    |
| Prices (dollars per bushel):                    |           |         |         |         |         |         |         |         |         |         |         |         |
| Farm price                                      | 1.12      | 1.15    | 1.10    | 1.15    | 1.20    | 1.25    | 1.30    | 1.35    | 1.40    | 1.45    | 1.45    | 1.45    |
| Loan rate                                       | 1.13      | 1.16    | 1.21    | 0.99    | 0.94    | 0.97    | 1.01    | 1.03    | 1.06    | 1.08    | 1.09    | 1.09    |
| Variable costs of production (dollars):         |           |         |         |         |         |         |         |         |         |         |         |         |
| Per acre  | 48.05     | 49.71   | 50.45   | 50.87   | 51.61   | 52.44   | 53.27   | 54.16   | 55.08   | 56.06   | 57.13   | 58.26   |
| Per bushel                                      | 0.81      | 0.77    | 0.83    | 0.83    | 0.84    | 0.85    | 0.86    | 0.87    | 0.87    | 0.88    | 0.90    | 0.91    |
| Returns over variable costs (dollars per acre): |           |         |         |         |         |         |         |         |         |         |         |         |
| Net returns 2/                                  | 30.03     | 34.66   | 31.97   | 19.28   | 22.07   | 24.81   | 27.59   | 30.35   | 33.12   | 35.87   | 35.38   | 34.83   |

1/ The cropping history allocation is based on 1998 plantings on farms with CRP acreage, and is used as a general indicator influencing land available for plantings.

2/ Net returns include estimates of marketing loan benefits.

Table 15. Wheat baseline

| Item  | 1999/2000 | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 |
|---|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Acreage (million acres):                        |           |         |         |         |         |         |         |         |         |         |         |         |
| CRP acres:                                      |           |         |         |         |         |         |         |         |         |         |         |         |
| Cropping history 1/                             | 7.4       | 7.7     | 8.3     | 8.5     | 8.9     | 8.9     | 8.9     | 8.9     | 8.9     | 8.9     | 8.9     | 8.9     |
| Planted acres                                   | 62.7      | 62.5    | 62.0    | 61.0    | 62.5    | 63.5    | 64.5    | 64.5    | 64.5    | 65.0    | 65.5    | 66.0    |
| Harvested acres                                 | 53.8      | 53.2    | 53.8    | 53.3    | 54.6    | 55.4    | 56.3    | 56.3    | 56.3    | 56.7    | 57.2    | 57.6    |
| Yields (bushels per acre):                      |           |         |         |         |         |         |         |         |         |         |         |         |
| Yield/harvested acre                            | 42.7      | 42.1    | 40.8    | 41.1    | 41.4    | 41.8    | 42.2    | 42.6    | 43.0    | 43.4    | 43.8    | 44.2    |
| Supply and use (million bushels):               |           |         |         |         |         |         |         |         |         |         |         |         |
| Beginning stocks                                | 946       | 950     | 888     | 775     | 675     | 638     | 625     | 637     | 639     | 625     | 616     | 591     |
| Production                                      | 2,299     | 2,239   | 2,195   | 2,190   | 2,260   | 2,315   | 2,375   | 2,400   | 2,420   | 2,460   | 2,505   | 2,545   |
| Imports   | 95        | 100     | 100     | 105     | 110     | 115     | 115     | 115     | 115     | 115     | 115     | 115     |
| Supply  | 3,339     | 3,289   | 3,183   | 3,070   | 3,045   | 3,068   | 3,115   | 3,152   | 3,174   | 3,200   | 3,236   | 3,251   |
| Food  | 925       | 940     | 950     | 960     | 970     | 980     | 990     | 1,000   | 1,010   | 1,020   | 1,030   | 1,040   |
| Seed  | 92        | 86      | 83      | 85      | 87      | 88      | 88      | 88      | 89      | 89      | 90      | 91      |
| Feed & residual                                 | 284       | 250     | 275     | 225     | 225     | 225     | 225     | 225     | 225     | 225     | 225     | 225     |
| Domestic  | 1,300     | 1,276   | 1,308   | 1,270   | 1,282   | 1,293   | 1,303   | 1,313   | 1,324   | 1,334   | 1,345   | 1,356   |
| Exports   | 1,090     | 1,125   | 1,100   | 1,125   | 1,125   | 1,150   | 1,175   | 1,200   | 1,225   | 1,250   | 1,300   | 1,325   |
| Total use                                       | 2,390     | 2,401   | 2,408   | 2,395   | 2,407   | 2,443   | 2,478   | 2,513   | 2,549   | 2,584   | 2,645   | 2,681   |
| Ending stocks                                   | 950       | 888     | 775     | 675     | 638     | 625     | 637     | 639     | 625     | 616     | 591     | 570     |
| Stocks/use ratio, percent                       | 39.7      | 37.0    | 32.2    | 28.2    | 26.5    | 25.6    | 25.7    | 25.4    | 24.5    | 23.8    | 22.3    | 21.3    |
| Prices (dollars per bushel):                    |           |         |         |         |         |         |         |         |         |         |         |         |
| Farm price                                      | 2.48      | 2.55    | 2.70    | 2.95    | 3.10    | 3.20    | 3.20    | 3.25    | 3.35    | 3.45    | 3.60    | 3.70    |
| Loan rate                                       | 2.58      | 2.58    | 2.58    | 2.24    | 2.24    | 2.32    | 2.48    | 2.58    | 2.58    | 2.58    | 2.58    | 2.58    |
| Variable costs of production (dollars):         |           |         |         |         |         |         |         |         |         |         |         |         |
| Per acre  | 55.92     | 57.64   | 58.60   | 59.18   | 60.12   | 61.16   | 62.19   | 63.29   | 64.45   | 65.68   | 67.01   | 68.42   |
| Per bushel                                      | 1.31      | 1.37    | 1.44    | 1.44    | 1.45    | 1.46    | 1.47    | 1.49    | 1.50    | 1.51    | 1.53    | 1.55    |
| Returns over variable costs (dollars per acre): |           |         |         |         |         |         |         |         |         |         |         |         |
| Net returns 2/                                  | 67.48     | 63.61   | 58.90   | 62.06   | 68.22   | 72.60   | 72.85   | 75.16   | 79.60   | 84.05   | 90.67   | 95.12   |

1/ The cropping history allocation is based on 1998 plantings on farms with CRP acreage, and is used as a general indicator influencing land available for plantings.

2/ Net returns include estimates of marketing loan benefits.

Table 16. Rice baseline

| Item  | 1999/2000 | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 |
|---|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Acreage (thousand acres):                       |           |         |         |         |         |         |         |         |         |         |         |         |
| Planted   | 3,531     | 3,110   | 3,200   | 3,200   | 3,185   | 3,165   | 3,145   | 3,130   | 3,115   | 3,075   | 3,050   | 3,035   |
| Harvested                                       | 3,512     | 3,085   | 3,174   | 3,174   | 3,160   | 3,140   | 3,120   | 3,105   | 3,090   | 3,050   | 3,026   | 3,011   |
| Yields (pounds per acre):                       |           |         |         |         |         |         |         |         |         |         |         |         |
| Yield/harvested acre                            | 5,866     | 6,230   | 6,150   | 6,181   | 6,213   | 6,246   | 6,279   | 6,312   | 6,345   | 6,381   | 6,415   | 6,449   |
| Supply and use (million cwt):                   |           |         |         |         |         |         |         |         |         |         |         |         |
| Beginning stocks                                | 22.1      | 27.5    | 27.1    | 27.0    | 27.3    | 27.3    | 27.4    | 27.6    | 27.2    | 27.1    | 27.1    | 27.2    |
| Production                                      | 206.0     | 192.2   | 195.2   | 196.2   | 196.3   | 196.1   | 195.9   | 196.0   | 196.1   | 194.6   | 194.1   | 194.2   |
| Imports   | 10.0      | 10.3    | 10.5    | 10.8    | 11.0    | 11.3    | 11.6    | 11.9    | 12.2    | 12.5    | 12.8    | 13.1    |
| Total supply                                    | 238.1     | 230.0   | 232.8   | 233.9   | 234.7   | 234.7   | 234.9   | 235.5   | 235.5   | 234.2   | 234.0   | 234.5   |
| Domestic use and residual                       | 122.6     | 122.9   | 125.8   | 128.6   | 131.4   | 134.3   | 137.3   | 140.3   | 143.4   | 146.6   | 149.8   | 153.1   |
| Exports   | 88.0      | 80.0    | 80.0    | 78.0    | 76.0    | 73.0    | 70.0    | 68.0    | 65.0    | 60.5    | 57.0    | 54.5    |
| Total use                                       | 210.6     | 202.9   | 205.8   | 206.6   | 207.4   | 207.3   | 207.3   | 208.3   | 208.4   | 207.1   | 206.8   | 207.6   |
| Ending stocks (million cwt.)                    | 27.5      | 27.1    | 27.0    | 27.3    | 27.3    | 27.4    | 27.6    | 27.2    | 27.1    | 27.1    | 27.2    | 26.9    |
| Stocks/use ratio, percent                       | 13.1      | 13.3    | 13.1    | 13.2    | 13.1    | 13.2    | 13.3    | 13.0    | 13.0    | 13.1    | 13.1    | 12.9    |
| Milling rate, percent                           | 69.1      | 69.5    | 69.5    | 69.5    | 69.5    | 69.5    | 69.5    | 69.5    | 69.5    | 69.5    | 69.5    | 69.5    |
| Prices (dollars per cwt.):                      |           |         |         |         |         |         |         |         |         |         |         |         |
| World price                                     | 4.50      | 3.75    | 3.85    | 4.00    | 4.15    | 4.30    | 4.45    | 4.60    | 4.75    | 4.90    | 5.05    | 5.20    |
| Average market price                            | 6.11      | 6.00    | 6.10    | 6.27    | 6.45    | 6.62    | 6.79    | 6.99    | 7.17    | 7.34    | 7.51    | 7.71    |
| Loan rate                                       | 6.50      | 6.50    | 6.50    | 6.50    | 6.50    | 6.50    | 6.50    | 6.50    | 6.50    | 6.50    | 6.50    | 6.50    |
| Variable costs of production (dollars):         |           |         |         |         |         |         |         |         |         |         |         |         |
| Per acre  | 356       | 375     | 378     | 381     | 387     | 393     | 400     | 407     | 414     | 422     | 430     | 438     |
| Per cwt.  | 6.06      | 6.01    | 6.15    | 6.17    | 6.23    | 6.30    | 6.37    | 6.45    | 6.53    | 6.61    | 6.70    | 6.80    |
| Returns over variable costs (dollars per acre): |           |         |         |         |         |         |         |         |         |         |         |         |
| Net returns 1/                                  | 115       | 171     | 160     | 161     | 160     | 157     | 155     | 154     | 152     | 149     | 145     | 143     |

1/ Net returns include estimates of marketing loan benefits.

Table 17. Upland cotton baseline

| Item  | 1999/2000 | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 |
|---|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Acreage (million acres):                        |           |         |         |         |         |         |         |         |         |         |         |         |
| CRP acres:                                      |           |         |         |         |         |         |         |         |         |         |         |         |
| Cropping history 1/                             | 1.0       | 1.0     | 1.1     | 1.1     | 1.2     | 1.2     | 1.2     | 1.2     | 1.2     | 1.2     | 1.2     | 1.2     |
| Planted acres                                   | 14.6      | 15.4    | 15.0    | 15.0    | 14.5    | 14.4    | 14.3    | 14.2    | 14.1    | 14.0    | 13.9    | 13.8    |
| Harvested acres                                 | 13.1      | 13.4    | 13.8    | 13.8    | 13.3    | 13.2    | 13.2    | 13.1    | 13.0    | 12.9    | 12.8    | 12.7    |
| Yields (pounds per acre):                       |           |         |         |         |         |         |         |         |         |         |         |         |
| Yield/harvested acre                            | 595       | 613     | 635     | 638     | 641     | 644     | 647     | 650     | 653     | 656     | 659     | 662     |
| Supply and use (thousand bales):                |           |         |         |         |         |         |         |         |         |         |         |         |
| Beginning stocks                                | 3,836     | 3,672   | 3,729   | 4,349   | 4,719   | 4,639   | 4,509   | 4,479   | 4,399   | 4,369   | 4,289   | 4,259   |
| Production                                      | 16,294    | 17,079  | 18,300  | 18,300  | 17,800  | 17,700  | 17,800  | 17,700  | 17,700  | 17,600  | 17,600  | 17,500  |
| Imports   | 53        | 55      | 25      | 25      | 25      | 25      | 25      | 25      | 25      | 25      | 25      | 25      |
| Supply  | 20,183    | 20,806  | 22,054  | 22,674  | 22,544  | 22,364  | 22,334  | 22,204  | 22,124  | 21,994  | 21,914  | 21,784  |
| Domestic use                                    | 10,103    | 9,960   | 10,000  | 9,950   | 9,900   | 9,850   | 9,800   | 9,700   | 9,600   | 9,500   | 9,400   | 9,300   |
| Exports   | 6,303     | 7,125   | 7,700   | 8,000   | 8,000   | 8,000   | 8,050   | 8,100   | 8,150   | 8,200   | 8,250   | 8,300   |
| Total use                                       | 16,406    | 17,085  | 17,700  | 17,950  | 17,900  | 17,850  | 17,850  | 17,800  | 17,750  | 17,700  | 17,650  | 17,600  |
| Ending stocks                                   | 3,672     | 3,729   | 4,349   | 4,719   | 4,639   | 4,509   | 4,479   | 4,399   | 4,369   | 4,289   | 4,259   | 4,179   |
| Stocks/use ratio, percent                       | 22.4      | 21.8    | 24.6    | 26.3    | 25.9    | 25.3    | 25.1    | 24.7    | 24.6    | 24.2    | 24.1    | 23.7    |
| Prices (dollars per pound):                     |           |         |         |         |         |         |         |         |         |         |         |         |
| Farm price 2/                                   | 0.450     | --      | --      | --      | --      | --      | --      | --      | --      | --      | --      | --      |
| Loan rate                                       | 0.5192    | 0.5192  | 0.5192  | 0.5192  | 0.5192  | 0.5192  | 0.5192  | 0.5192  | 0.5192  | 0.5192  | 0.5192  | 0.5192  |
| Variable costs of production (dollars):         |           |         |         |         |         |         |         |         |         |         |         |         |
| Per acre  | 274.13    | 282.46  | 289.46  | 294.26  | 299.96  | 306.15  | 312.40  | 318.86  | 325.74  | 332.91  | 340.43  | 348.33  |
| Per pound                                       | 0.46      | 0.46    | 0.46    | 0.46    | 0.47    | 0.48    | 0.48    | 0.49    | 0.50    | 0.51    | 0.52    | 0.53    |
| Returns over variable costs (dollars per acre): |           |         |         |         |         |         |         |         |         |         |         |         |
| Net returns 3/                                  | 143.92    | 158.84  | 160.44  | 138.05  | 140.73  | 144.07  | 145.22  | 146.80  | 147.48  | 147.35  | 147.49  | 146.72  |

1/ The cropping history allocation is based on 1998 plantings on farms with CRP acreage, and is used as a general indicator influencing land available for plantings.

2/ USDA is prohibited from publishing cotton price projections.

3/ Net returns include estimates of marketing loan benefits.

Table 18. Soybean and products baseline

| Item  | 1999/2000 | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 |
|---|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| <b>Soybeans</b>                                 |           |         |         |         |         |         |         |         |         |         |         |         |
| Acreage (million acres)                         |           |         |         |         |         |         |         |         |         |         |         |         |
| Planted   | 73.7      | 74.5    | 75.0    | 74.0    | 73.0    | 73.0    | 73.5    | 74.0    | 74.0    | 74.3    | 74.5    | 74.8    |
| Harvested                                       | 72.4      | 73.0    | 74.0    | 73.0    | 72.0    | 72.0    | 72.5    | 73.0    | 73.0    | 73.3    | 73.5    | 73.8    |
| Yield/harvested acre (bushels)                  | 36.6      | 38.7    | 39.5    | 40.0    | 40.5    | 41.0    | 41.5    | 42.0    | 42.5    | 43.0    | 43.5    | 44.0    |
| Supply (million bushels)                        |           |         |         |         |         |         |         |         |         |         |         |         |
| Beginning stocks, Sep. 1                        | 348       | 288     | 365     | 460     | 455     | 380     | 310     | 270     | 255     | 240     | 230     | 225     |
| Production                                      | 2,654     | 2,823   | 2,925   | 2,920   | 2,915   | 2,950   | 3,010   | 3,065   | 3,105   | 3,150   | 3,195   | 3,245   |
| Imports   | 4         | 3       | 6       | 5       | 5       | 9       | 7       | 10      | 7       | 10      | 8       | 10      |
| Total supply                                    | 3,006     | 3,114   | 3,296   | 3,385   | 3,375   | 3,339   | 3,327   | 3,345   | 3,367   | 3,400   | 3,433   | 3,480   |
| Disposition (million bushels)                   |           |         |         |         |         |         |         |         |         |         |         |         |
| Crush   | 1,579     | 1,615   | 1,660   | 1,720   | 1,760   | 1,795   | 1,830   | 1,865   | 1,895   | 1,930   | 1,960   | 1,995   |
| Seed and residual                               | 166       | 169     | 166     | 170     | 170     | 174     | 177     | 180     | 182     | 185     | 188     | 190     |
| Exports   | 973       | 965     | 1,010   | 1,040   | 1,065   | 1,060   | 1,050   | 1,045   | 1,050   | 1,055   | 1,060   | 1,070   |
| Total disposition                               | 2,719     | 2,749   | 2,836   | 2,930   | 2,995   | 3,029   | 3,057   | 3,090   | 3,127   | 3,170   | 3,208   | 3,255   |
| Carryover stocks, Aug. 31                       |           |         |         |         |         |         |         |         |         |         |         |         |
| Total ending stocks                             | 288       | 365     | 460     | 455     | 380     | 310     | 270     | 255     | 240     | 230     | 225     | 225     |
| Stocks/use ratio, percent                       | 10.6      | 13.3    | 16.2    | 15.5    | 12.7    | 10.2    | 8.8     | 8.3     | 7.7     | 7.3     | 7.0     | 6.9     |
| Prices (dollars per bushel)                     |           |         |         |         |         |         |         |         |         |         |         |         |
| Loan rate                                       | 5.26      | 5.26    | 5.26    | 4.92    | 4.92    | 4.92    | 4.92    | 4.92    | 4.92    | 4.92    | 4.92    | 5.07    |
| Soybean price, farm                             | 4.65      | 4.90    | 4.55    | 4.65    | 4.95    | 5.25    | 5.60    | 5.80    | 5.95    | 6.15    | 6.25    | 6.30    |
| Variable costs of production (dollars):         |           |         |         |         |         |         |         |         |         |         |         |         |
| Per acre  | 76.59     | 77.82   | 78.88   | 79.85   | 80.87   | 82.05   | 83.23   | 84.45   | 85.81   | 87.31   | 88.95   | 90.70   |
| Per bushel                                      | 2.09      | 2.01    | 2.00    | 2.00    | 2.00    | 2.00    | 2.01    | 2.01    | 2.02    | 2.03    | 2.04    | 2.06    |
| Returns over variable costs (dollars per acre): |           |         |         |         |         |         |         |         |         |         |         |         |
| Net returns 1/                                  | 125.45    | 135.41  | 138.77  | 126.95  | 128.51  | 133.20  | 149.17  | 159.15  | 167.07  | 177.14  | 182.93  | 186.50  |
| <b>Soybean oil (million pounds)</b>             |           |         |         |         |         |         |         |         |         |         |         |         |
| Beginning stocks, Oct. 1                        | 1,520     | 1,970   | 1,990   | 1,885   | 1,910   | 1,855   | 1,685   | 1,585   | 1,570   | 1,555   | 1,595   | 1,615   |
| Production                                      | 17,845    | 18,330  | 18,815  | 19,520  | 19,985  | 20,390  | 20,805  | 21,235  | 21,605  | 22,030  | 22,405  | 22,840  |
| Imports   | 80        | 90      | 80      | 80      | 85      | 90      | 95      | 100     | 105     | 110     | 115     | 115     |
| Total supply                                    | 19,445    | 20,390  | 20,885  | 21,485  | 21,980  | 22,335  | 22,585  | 22,920  | 23,280  | 23,695  | 24,115  | 24,570  |
| Domestic disappearance                          | 16,100    | 16,500  | 16,875  | 17,200  | 17,550  | 17,900  | 18,250  | 18,600  | 18,950  | 19,300  | 19,650  | 20,000  |
| Exports   | 1,375     | 1,900   | 2,125   | 2,375   | 2,575   | 2,750   | 2,750   | 2,750   | 2,775   | 2,800   | 2,850   | 2,900   |
| Total demand                                    | 17,475    | 18,400  | 19,000  | 19,575  | 20,125  | 20,650  | 21,000  | 21,350  | 21,725  | 22,100  | 22,500  | 22,900  |
| Ending stocks, Sep. 30                          | 1,970     | 1,990   | 1,885   | 1,910   | 1,855   | 1,685   | 1,585   | 1,570   | 1,555   | 1,595   | 1,615   | 1,670   |
| Soybean oil price (dollars per lb)              | 0.156     | 0.165   | 0.173   | 0.183   | 0.195   | 0.210   | 0.225   | 0.235   | 0.243   | 0.250   | 0.255   | 0.260   |
| <b>Soybean meal (thousand short tons)</b>       |           |         |         |         |         |         |         |         |         |         |         |         |
| Beginning stocks, Oct. 1                        | 330       | 225     | 250     | 250     | 250     | 250     | 250     | 250     | 250     | 250     | 250     | 250     |
| Production                                      | 37,620    | 38,410  | 39,475  | 40,825  | 41,850  | 42,625  | 43,450  | 44,250  | 45,025  | 45,800  | 46,575  | 47,350  |
| Imports   | 50        | 65      | 75      | 75      | 100     | 100     | 100     | 100     | 100     | 100     | 100     | 100     |
| Total supply                                    | 38,000    | 38,700  | 39,800  | 41,150  | 42,200  | 42,975  | 43,800  | 44,600  | 45,375  | 46,150  | 46,925  | 47,700  |
| Domestic disappearance                          | 30,450    | 31,200  | 31,900  | 32,800  | 33,550  | 34,275  | 35,000  | 35,700  | 36,375  | 37,050  | 37,725  | 38,400  |
| Exports   | 7,325     | 7,250   | 7,650   | 8,100   | 8,400   | 8,450   | 8,550   | 8,650   | 8,750   | 8,850   | 8,950   | 9,050   |
| Total demand                                    | 37,775    | 38,450  | 39,550  | 40,900  | 41,950  | 42,725  | 43,550  | 44,350  | 45,125  | 45,900  | 46,675  | 47,450  |
| Ending stocks, Sep. 30                          | 225       | 250     | 250     | 250     | 250     | 250     | 250     | 250     | 250     | 250     | 250     | 250     |
| Soybean meal price (dollars per ton)            | 167.00    | 172.50  | 157.50  | 157.00  | 162.50  | 166.50  | 173.50  | 176.50  | 178.50  | 183.50  | 183.50  | 182.50  |
| Crushing yields (pounds per bushel)             |           |         |         |         |         |         |         |         |         |         |         |         |
| Soybean oil                                     | 11.30     | 11.35   | 11.34   | 11.35   | 11.36   | 11.36   | 11.37   | 11.39   | 11.40   | 11.42   | 11.43   | 11.45   |
| Soybean meal                                    | 47.64     | 47.50   | 47.50   | 47.50   | 47.50   | 47.50   | 47.50   | 47.50   | 47.50   | 47.50   | 47.50   | 47.50   |
| Crush margin (dollars per bushel)               | 1.09      | 1.07    | 1.15    | 1.15    | 1.12    | 1.09    | 1.08    | 1.07    | 1.05    | 1.06    | 1.02    | 1.01    |

1/ Net returns include estimates of marketing loan benefits.

Table 19. U.S. sugar: supply, disappearance, and prices, fiscal years 1/

| Item                        | Units         | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   | 2011   |
|-----------------------------|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Sugarbeets</b>           |               |        |        |        |        |        |        |        |        |        |        |        |        |
| Planted area                | 1,000 acres   | 1,561  | 1,561  | 1,518  | 1,520  | 1,527  | 1,528  | 1,521  | 1,511  | 1,501  | 1,493  | 1,485  | 1,478  |
| Harvested area              | 1,000 acres   | 1,527  | 1,375  | 1,484  | 1,486  | 1,493  | 1,495  | 1,488  | 1,478  | 1,468  | 1,460  | 1,453  | 1,446  |
| Yield                       | Tons/acre     | 21.9   | 22.9   | 21.4   | 21.5   | 21.6   | 21.7   | 21.8   | 21.9   | 22.0   | 22.1   | 22.2   | 22.3   |
| Production                  | Mil. s. tons  | 33.4   | 31.5   | 31.8   | 31.9   | 32.2   | 32.4   | 32.4   | 32.3   | 32.2   | 32.2   | 32.2   | 32.2   |
| <b>Sugarcane</b>            |               |        |        |        |        |        |        |        |        |        |        |        |        |
| Harvested area              | 1,000 acres   | 944    | 985    | 979    | 980    | 974    | 957    | 947    | 937    | 930    | 923    | 917    | 911    |
| Yield                       | Tons/acre     | 35.3   | 34.6   | 35.7   | 36.1   | 36.5   | 36.5   | 36.5   | 36.5   | 36.6   | 36.6   | 36.6   | 36.6   |
| Production                  | Mil. s. tons  | 33.3   | 34.0   | 34.9   | 35.4   | 35.6   | 34.9   | 34.6   | 34.3   | 34.0   | 33.8   | 33.5   | 33.3   |
| <b>Supply:</b>              |               |        |        |        |        |        |        |        |        |        |        |        |        |
| Beginning stocks            | 1,000 s. tons | 1,639  | 1,944  | 1,619  | 1,674  | 1,743  | 2,320  | 2,706  | 2,907  | 3,043  | 3,158  | 3,853  | 4,467  |
| Production                  | 1,000 s. tons | 9,035  | 8,446  | 8,862  | 8,961  | 9,058  | 9,038  | 9,031  | 9,016  | 9,006  | 9,010  | 9,013  | 9,020  |
| Beet sugar                  | 1,000 s. tons | 4,950  | 4,350  | 4,614  | 4,648  | 4,701  | 4,738  | 4,750  | 4,751  | 4,751  | 4,759  | 4,767  | 4,775  |
| Cane sugar                  | 1,000 s. tons | 4,085  | 4,096  | 4,248  | 4,313  | 4,356  | 4,300  | 4,281  | 4,265  | 4,255  | 4,252  | 4,246  | 4,244  |
| Total imports               | 1,000 s. tons | 1,610  | 1,790  | 1,863  | 1,913  | 2,459  | 2,423  | 2,380  | 2,465  | 2,589  | 3,300  | 3,351  | 3,586  |
| TRQ less NAFTA 2/           | 1,000 s. tons | 1,063  | 1,158  | 1,158  | 1,208  | 1,208  | 1,208  | 1,208  | 1,208  | 1,208  | 1,208  | 1,208  | 1,208  |
| Mexico - NAFTA low-tier     | 1,000 s. tons | 28     | 117    | 264    | 264    | 264    | 264    | 209    | 264    | 0      | 0      | 0      | 0      |
| Mexico - NAFTA high-tier 3/ | 1,000 s. tons | 4      | 20     | 0      | 0      | 546    | 510    | 523    | 553    | 940    | 1,651  | 1,702  | 1,937  |
| Other high-tier tariff      | 1,000 s. tons | 2      | 5      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Re-export and polyhydric    | 1,000 s. tons | 388    | 365    | 315    | 315    | 315    | 315    | 315    | 315    | 315    | 315    | 315    | 315    |
| Other imports (17029040)    | 1,000 s. tons | 125    | 125    | 125    | 125    | 125    | 125    | 125    | 125    | 125    | 125    | 125    | 125    |
| Total supply                | 1,000 s. tons | 12,284 | 12,179 | 12,344 | 12,548 | 13,260 | 13,781 | 14,117 | 14,388 | 14,638 | 15,468 | 16,217 | 17,073 |
| <b>Use:</b>                 |               |        |        |        |        |        |        |        |        |        |        |        |        |
| Exports                     | 1,000 s. tons | 125    | 175    | 150    | 150    | 150    | 150    | 150    | 150    | 150    | 150    | 150    | 150    |
| Domestic deliveries         | 1,000 s. tons | 10,215 | 10,385 | 10,520 | 10,655 | 10,790 | 10,925 | 11,060 | 11,195 | 11,330 | 11,465 | 11,600 | 11,735 |
| Miscellaneous               | 1,000 s. tons | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      |
| Total use                   | 1,000 s. tons | 10,340 | 10,560 | 10,670 | 10,805 | 10,940 | 11,075 | 11,210 | 11,345 | 11,480 | 11,615 | 11,750 | 11,885 |
| Ending stocks               | 1,000 s. tons | 1,944  | 1,619  | 1,674  | 1,743  | 2,320  | 2,706  | 2,907  | 3,043  | 3,158  | 3,853  | 4,467  | 5,188  |
| CCC acquisitions            | 1,000 s. tons | 297    | 528    | 0      | 0      | 446    | 363    | 178    | 113    | 91     | 672    | 591    | 697    |
| Stocks/use ratio            | Percent       | 18.8   | 15.3   | 15.7   | 16.1   | 21.2   | 24.4   | 25.9   | 26.8   | 27.5   | 33.2   | 38.0   | 43.7   |
| <b>Raw sugar prices:</b>    |               |        |        |        |        |        |        |        |        |        |        |        |        |
| N.Y. (No. 14)               | Cents/lb.     | 18.40  | 21.50  | 20.60  | 20.37  | 19.86  | 19.86  | 19.86  | 19.86  | 19.86  | 19.86  | 19.86  | 19.86  |
| Raw sugar loan rate         | Cents/lb.     | 18.00  | 18.00  | 18.00  | 18.00  | 18.00  | 18.00  | 18.00  | 18.00  | 18.00  | 18.00  | 18.00  | 18.00  |
| Beet sugar loan rate        | Cents/lb.     | 22.90  | 22.90  | 22.90  | 22.90  | 22.90  | 22.90  | 22.90  | 22.90  | 22.90  | 22.90  | 22.90  | 22.90  |
| <b>Grower prices:</b>       |               |        |        |        |        |        |        |        |        |        |        |        |        |
| Sugarbeets                  | Dol./ton      | 36.50  | 38.14  | 38.13  | 38.13  | 38.14  | 38.14  | 38.15  | 38.16  | 38.16  | 38.16  | 38.17  | 38.17  |
| Sugarcane                   | Dol./ton      | 24.10  | 26.15  | 25.88  | 25.55  | 24.89  | 24.91  | 24.93  | 24.94  | 24.96  | 24.97  | 24.98  | 24.99  |

1/ Fiscal year is October 1 through September 30.

2/ Includes 8,000 STRV allocated to Mexico as part of the raw sugar TRQ and 3,256 STRV to Mexico as part of the refined sugar TRQ.

3/ Starting in FY 2008 under NAFTA, Mexico can ship duty-free sugar to the United States with no quantitative limit.

Table 20. Flue-cured tobacco baseline

| Item                            | Unit        | 1999/2000 | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 |
|---------------------------------|-------------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Acreage, yield, and production: |             |           |         |         |         |         |         |         |         |         |         |         |         |
| Planted area                    | 1,000 acres | 304       | 254     | 262     | 278     | 278     | 273     | 260     | 253     | 250     | 250     | 245     | 245     |
| Harvested area                  | 1,000 acres | 304       | 254     | 262     | 278     | 278     | 273     | 260     | 253     | 250     | 250     | 245     | 245     |
| Yield                           | lbs./acre   | 2,162     | 2,352   | 2,250   | 2,250   | 2,250   | 2,250   | 2,250   | 2,250   | 2,250   | 2,250   | 2,250   | 2,250   |
| Production                      | Mil. lbs.   | 657       | 597     | 590     | 626     | 626     | 614     | 585     | 569     | 563     | 563     | 551     | 551     |
| Supply:                         |             |           |         |         |         |         |         |         |         |         |         |         |         |
| Beg. stocks                     | Mil. lbs.   | 1,234     | 1,190   | 1,030   | 915     | 855     | 815     | 785     | 745     | 710     | 677     | 650     | 621     |
| Marketings                      | Mil. lbs.   | 654       | 565     | 590     | 625     | 625     | 615     | 585     | 570     | 563     | 563     | 551     | 551     |
| Total 1/                        | Mil. lbs.   | 1,888     | 1,755   | 1,620   | 1,540   | 1,480   | 1,430   | 1,370   | 1,315   | 1,272   | 1,240   | 1,201   | 1,172   |
| Imports                         | Mil. lbs.   | (350)     | (300)   | (300)   | (300)   | (300)   | (300)   | (300)   | (300)   | (300)   | (310)   | (320)   | (320)   |
| Use:                            |             |           |         |         |         |         |         |         |         |         |         |         |         |
| Domestic                        | Mil. lbs.   | 437       | 435     | 420     | 405     | 390     | 375     | 360     | 350     | 345     | 340     | 335     | 330     |
| Exports                         | Mil. lbs.   | 262       | 290     | 285     | 280     | 275     | 270     | 265     | 255     | 250     | 250     | 250     | 245     |
| Total 1/                        | Mil. lbs.   | 699       | 725     | 705     | 685     | 665     | 645     | 625     | 605     | 595     | 590     | 585     | 575     |
| Ending stocks:                  |             |           |         |         |         |         |         |         |         |         |         |         |         |
| Total                           | Mil. lbs.   | 1,190     | 1,030   | 915     | 855     | 815     | 785     | 745     | 710     | 677     | 650     | 621     | 597     |
| Price:                          |             |           |         |         |         |         |         |         |         |         |         |         |         |
| Avg. to growers                 | \$/cwt      | 174       | 179     | 182     | 185     | 188     | 191     | 194     | 194     | 200     | 203     | 206     | 209     |
| Support                         | \$/cwt      | 163       | 164     | 167     | 170     | 173     | 176     | 179     | 182     | 185     | 188     | 191     | 195     |

1/ Domestic tobacco only.

Table 21. Burley tobacco baseline

| Item                            | Unit        | 1999/2000 | 2000/01 | 2001/02 | 2002/03 | 2003/04 | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 |
|---------------------------------|-------------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Acreage, yield, and production: |             |           |         |         |         |         |         |         |         |         |         |         |         |
| Planted area                    | 1,000 acres | 301       | 201     | 183     | 183     | 190     | 190     | 190     | 179     | 160     | 160     | 150     | 150     |
| Harvested area                  | 1,000 acres | 301       | 201     | 183     | 183     | 190     | 190     | 190     | 179     | 160     | 160     | 150     | 150     |
| Yield                           | lbs./acre   | 1,829     | 2,048   | 2,100   | 2,100   | 2,100   | 2,100   | 2,100   | 2,100   | 2,100   | 2,100   | 2,100   | 2,100   |
| Production                      | Mil. lbs.   | 550       | 412     | 384     | 384     | 399     | 399     | 399     | 376     | 336     | 336     | 315     | 315     |
| Supply:                         |             |           |         |         |         |         |         |         |         |         |         |         |         |
| Beg. stocks                     | Mil. lbs.   | 901       | 1,026   | 601     | 531     | 476     | 451     | 441     | 446     | 441     | 402     | 378     | 333     |
| Marketings                      | Mil. lbs.   | 551       | 300     | 385     | 385     | 400     | 400     | 400     | 375     | 336     | 336     | 315     | 315     |
| Total 1/                        | Mil. lbs.   | 1,453     | 1,326   | 986     | 916     | 876     | 851     | 841     | 821     | 777     | 738     | 693     | 648     |
| Imports                         | Mil. lbs.   | (185)     | (175)   | (175)   | (175)   | (185)   | (195)   | (205)   | (210)   | (215)   | (220)   | (220)   | (225)   |
| Use:                            |             |           |         |         |         |         |         |         |         |         |         |         |         |
| Domestic                        | Mil. lbs.   | 286       | 320     | 310     | 300     | 290     | 280     | 270     | 260     | 260     | 250     | 250     | 240     |
| Exports                         | Mil. lbs.   | 140       | 150     | 145     | 140     | 135     | 130     | 125     | 120     | 115     | 110     | 110     | 115     |
| Total 1/                        | Mil. lbs.   | 426       | 475     | 455     | 440     | 425     | 410     | 395     | 380     | 375     | 360     | 360     | 355     |
| Ending stocks:                  |             |           |         |         |         |         |         |         |         |         |         |         |         |
| Total                           | Mil. lbs.   | 1,026     | 601     | 531     | 476     | 451     | 441     | 446     | 441     | 402     | 378     | 333     | 293     |
| Price:                          |             |           |         |         |         |         |         |         |         |         |         |         |         |
| Avg. to growers                 | \$/cwt      | 190       | 193     | 196     | 200     | 203     | 205     | 209     | 212     | 216     | 219     | 223     | 227     |
| Support                         | \$/cwt      | 179       | 182     | 185     | 188     | 191     | 194     | 197     | 200     | 203     | 206     | 209     | 212     |

1/ Domestic tobacco only. Total use in 2000/01 includes loan settlement of 255 million pounds per the FY-2001 Agriculture Appropriations Act.

Table 22. Fruit, vegetable, and greenhouse/nursery baseline, production and prices

| Item                   | Unit         | 1999   | 2000   | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008   | 2009   | 2010   |
|------------------------|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Production value:      |              |        |        |        |        |        |        |        |        |        |        |        |        |
| Fruit and nuts         |              |        |        |        |        |        |        |        |        |        |        |        |        |
| Citrus                 | \$ Mil.      | 2,459  | 2,638  | 2,835  | 2,909  | 2,940  | 2,982  | 3,042  | 3,092  | 3,160  | 3,223  | 3,277  | 3,355  |
| Noncitrus              | \$ Mil.      | 8,282  | 8,956  | 9,320  | 9,562  | 9,733  | 9,868  | 10,027 | 10,258 | 10,552 | 10,908 | 11,313 | 11,747 |
| Nuts                   | \$ Mil.      | 1,486  | 1,799  | 2,019  | 2,019  | 2,168  | 2,178  | 2,354  | 2,293  | 2,521  | 2,402  | 2,667  | 2,588  |
| Total                  | \$ Mil.      | 12,227 | 13,393 | 14,174 | 14,490 | 14,841 | 15,028 | 15,424 | 15,644 | 16,233 | 16,534 | 17,258 | 17,691 |
| Vegetables             |              |        |        |        |        |        |        |        |        |        |        |        |        |
| Fresh 1/               | \$ Mil.      | 7,401  | 7,986  | 8,472  | 8,995  | 9,443  | 9,831  | 10,211 | 10,616 | 11,051 | 11,505 | 11,969 | 12,443 |
| Processed 2/           | \$ Mil.      | 1,733  | 1,541  | 1,628  | 1,628  | 1,670  | 1,701  | 1,728  | 1,757  | 1,785  | 1,813  | 1,840  | 1,866  |
| Potatoes               | \$ Mil.      | 2,746  | 2,790  | 2,898  | 2,857  | 2,956  | 3,089  | 3,180  | 3,244  | 3,285  | 3,317  | 3,350  | 3,388  |
| Sweet potatoes         | \$ Mil.      | 215    | 218    | 219    | 225    | 230    | 235    | 239    | 244    | 250    | 255    | 260    | 265    |
| Pulses                 | \$ Mil.      | 656    | 603    | 679    | 786    | 806    | 827    | 847    | 868    | 890    | 912    | 935    | 958    |
| Mushrooms              | \$ Mil.      | 867    | 867    | 855    | 879    | 902    | 924    | 945    | 964    | 983    | 1,001  | 1,018  | 1,033  |
| Total                  | \$ Mil.      | 13,618 | 14,007 | 14,751 | 15,370 | 16,007 | 16,607 | 17,151 | 17,695 | 18,245 | 18,802 | 19,371 | 19,953 |
| Greenhouse/Nursery     | \$ Mil.      | 12,239 | 12,689 | 13,139 | 13,589 | 14,039 | 14,489 | 14,939 | 15,389 | 15,839 | 16,289 | 16,739 | 17,189 |
| Production:            |              |        |        |        |        |        |        |        |        |        |        |        |        |
| Fruit                  |              |        |        |        |        |        |        |        |        |        |        |        |        |
| Citrus                 | 1,000 MT     | 12,368 | 15,788 | 15,720 | 15,752 | 15,779 | 16,001 | 16,281 | 16,422 | 16,671 | 16,844 | 16,901 | 17,146 |
| Noncitrus              | 1,000 MT     | 15,672 | 16,998 | 17,537 | 17,628 | 17,483 | 17,222 | 17,018 | 16,983 | 17,081 | 17,298 | 17,598 | 17,938 |
| Nuts                   | 1,000 MT     | 604    | 477    | 510    | 539    | 506    | 566    | 556    | 520    | 625    | 513    | 651    | 563    |
| Total                  | 1,000 MT     | 28,643 | 33,263 | 33,766 | 33,919 | 33,768 | 33,789 | 33,856 | 33,924 | 34,378 | 34,655 | 35,150 | 35,647 |
| Vegetables             |              |        |        |        |        |        |        |        |        |        |        |        |        |
| Fresh 1/               | 1,000 MT     | 19,810 | 19,559 | 20,242 | 20,745 | 21,268 | 21,765 | 22,255 | 22,745 | 23,241 | 23,745 | 24,255 | 24,770 |
| Processed 2/           | 1,000 MT     | 17,421 | 15,287 | 15,827 | 16,009 | 16,375 | 16,640 | 16,871 | 17,105 | 17,330 | 17,550 | 17,767 | 17,980 |
| Potatoes               | 1,000 MT     | 21,692 | 22,680 | 22,403 | 23,249 | 23,834 | 24,294 | 24,568 | 24,963 | 25,452 | 25,976 | 26,488 | 26,976 |
| Sweet potatoes         | 1,000 MT     | 555    | 673    | 633    | 643    | 644    | 647    | 649    | 652    | 655    | 658    | 661    | 664    |
| Pulses                 | 1,000 MT     | 1,876  | 1,420  | 1,851  | 1,921  | 2,010  | 2,062  | 2,112  | 2,163  | 2,215  | 2,268  | 2,323  | 2,378  |
| Mushrooms              | 1,000 MT     | 391    | 394    | 409    | 422    | 435    | 447    | 458    | 469    | 480    | 491    | 501    | 512    |
| Total                  | 1,000 MT     | 61,745 | 60,012 | 61,364 | 62,990 | 64,566 | 65,854 | 66,913 | 68,097 | 69,373 | 70,687 | 71,994 | 73,281 |
| Prices:                |              |        |        |        |        |        |        |        |        |        |        |        |        |
| Grower                 |              |        |        |        |        |        |        |        |        |        |        |        |        |
| Fruit and nuts         | 1990-92=100  | 115    | 101    | 113    | 124    | 127    | 129    | 132    | 134    | 137    | 139    | 142    | 144    |
| Vegetables             | 1990-92=100  | 108    | 122    | 127    | 129    | 131    | 133    | 135    | 137    | 139    | 141    | 143    | 145    |
| Potatoes               | \$/MT        | 127    | 123    | 129    | 123    | 124    | 127    | 129    | 130    | 129    | 128    | 126    | 126    |
| Dry beans              | \$/MT        | 388    | 463    | 406    | 456    | 444    | 443    | 443    | 442    | 442    | 442    | 442    | 441    |
| Retail                 |              |        |        |        |        |        |        |        |        |        |        |        |        |
| Fruit and vegetables   | 1982-84=100  | 203    | 204    | 210    | 217    | 222    | 229    | 235    | 241    | 247    | 254    | 260    | 267    |
| Fresh fruit            | 1982-84=100  | 266    | 259    | 268    | 279    | 287    | 295    | 304    | 312    | 321    | 329    | 338    | 347    |
| Fresh vegetables       | 1982-84=100  | 209    | 218    | 223    | 230    | 236    | 243    | 250    | 257    | 263    | 270    | 277    | 284    |
| Processed fruit & veg. | Dec 1997=100 | 105    | 106    | 108    | 111    | 113    | 116    | 119    | 122    | 125    | 128    | 131    | 134    |

1/ Includes artichokes, asparagus, snap beans, broccoli, brussels sprouts, cabbage, carrots, cauliflower, celery, sweet corn, eggplant, escarole-endive, garlic, lettuce, bell peppers, onions, spinach, tomatoes, and melons.

2/ Includes asparagus, lima beans, snap beans, broccoli, beets, cabbage, carrots, cauliflower, sweet corn, cucumbers, green peas, spinach, and tomatoes.

Table 23. Fruit, vegetable, and greenhouse/nursery baseline, trade

| Item               | Unit    | 1999  | 2000  | 2001  | 2002  | 2003  | 2004  | 2005  | 2006  | 2007  | 2008  | 2009   | 2010   |
|--------------------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| <b>Imports</b>     |         |       |       |       |       |       |       |       |       |       |       |        |        |
| Fruit and nuts 1/  |         |       |       |       |       |       |       |       |       |       |       |        |        |
| Fresh              | \$ Mil. | 3,256 | 3,053 | 3,281 | 3,378 | 3,486 | 3,596 | 3,708 | 3,822 | 3,938 | 4,054 | 4,173  | 4,293  |
| Processed          | \$ Mil. | 3,679 | 3,741 | 3,859 | 3,983 | 4,110 | 4,245 | 4,389 | 4,540 | 4,698 | 4,865 | 5,040  | 5,224  |
| Nuts               | \$ Mil. | 760   | 798   | 774   | 789   | 805   | 821   | 837   | 854   | 871   | 889   | 906    | 925    |
| Total              | \$ Mil. | 7,695 | 7,591 | 7,914 | 8,151 | 8,401 | 8,663 | 8,934 | 9,216 | 9,508 | 9,808 | 10,120 | 10,442 |
| Vegetables 2/      |         |       |       |       |       |       |       |       |       |       |       |        |        |
| Fresh              | \$ Mil. | 2,144 | 2,084 | 2,264 | 2,364 | 2,465 | 2,572 | 2,684 | 2,796 | 2,908 | 3,019 | 3,131  | 3,243  |
| Processed          | \$ Mil. | 1,082 | 976   | 1,024 | 1,068 | 1,114 | 1,163 | 1,212 | 1,259 | 1,303 | 1,347 | 1,391  | 1,435  |
| Potatoes           | \$ Mil. | 420   | 453   | 450   | 457   | 473   | 496   | 524   | 553   | 581   | 608   | 636    | 664    |
| Sweet potatoes     | \$ Mil. | 27    | 22    | 20    | 21    | 22    | 22    | 23    | 24    | 24    | 25    | 26     | 26     |
| Pulses             | \$ Mil. | 72    | 67    | 71    | 75    | 79    | 82    | 86    | 90    | 94    | 98    | 101    | 105    |
| Mushrooms          | \$ Mil. | 163   | 175   | 174   | 173   | 174   | 174   | 175   | 177   | 178   | 180   | 181    | 183    |
| Total              | \$ Mil. | 3,908 | 3,777 | 4,003 | 4,157 | 4,325 | 4,511 | 4,704 | 4,898 | 5,088 | 5,276 | 5,466  | 5,656  |
| Greenhouse/Nursery | \$ Mil. | 1,100 | 1,188 | 1,271 | 1,360 | 1,456 | 1,558 | 1,667 | 1,783 | 1,908 | 2,042 | 2,185  | 2,338  |
| <b>Exports</b>     |         |       |       |       |       |       |       |       |       |       |       |        |        |
| Fruit and nuts 1/  |         |       |       |       |       |       |       |       |       |       |       |        |        |
| Fresh              | \$ Mil. | 1,734 | 1,913 | 2,060 | 2,175 | 2,284 | 2,380 | 2,476 | 2,574 | 2,673 | 2,772 | 2,852  | 2,931  |
| Processed          | \$ Mil. | 1,959 | 1,882 | 1,984 | 2,083 | 2,191 | 2,298 | 2,404 | 2,516 | 2,631 | 2,754 | 2,885  | 3,025  |
| Nuts               | \$ Mil. | 992   | 963   | 968   | 1,023 | 1,068 | 1,114 | 1,150 | 1,185 | 1,221 | 1,256 | 1,292  | 1,327  |
| Total              | \$ Mil. | 4,686 | 4,758 | 5,012 | 5,281 | 5,543 | 5,792 | 6,030 | 6,276 | 6,525 | 6,782 | 7,028  | 7,282  |
| Vegetables 2/      |         |       |       |       |       |       |       |       |       |       |       |        |        |
| Fresh              | \$ Mil. | 1,027 | 1,087 | 1,077 | 1,136 | 1,143 | 1,200 | 1,211 | 1,263 | 1,277 | 1,326 | 1,343  | 1,389  |
| Processed          | \$ Mil. | 1,128 | 1,115 | 1,171 | 1,222 | 1,268 | 1,315 | 1,363 | 1,411 | 1,459 | 1,507 | 1,555  | 1,603  |
| Potatoes           | \$ Mil. | 806   | 775   | 863   | 890   | 934   | 973   | 1,012 | 1,051 | 1,093 | 1,136 | 1,180  | 1,223  |
| Sweet potatoes     | \$ Mil. | 10    | 13    | 12    | 12    | 13    | 14    | 14    | 15    | 16    | 16    | 17     | 18     |
| Pulses             | \$ Mil. | 313   | 267   | 306   | 329   | 338   | 344   | 350   | 356   | 362   | 369   | 375    | 382    |
| Mushrooms          | \$ Mil. | 21    | 23    | 26    | 27    | 29    | 30    | 31    | 33    | 34    | 35    | 36     | 38     |
| Total              | \$ Mil. | 3,306 | 3,280 | 3,454 | 3,617 | 3,725 | 3,876 | 3,982 | 4,129 | 4,241 | 4,389 | 4,507  | 4,652  |
| Greenhouse/Nursery | \$ Mil. | 299   | 275   | 303   | 312   | 321   | 331   | 341   | 351   | 362   | 372   | 384    | 395    |

1/ Fresh fruit includes bananas, excludes melons. Processed fruit includes juices and wine.

2/ Fresh vegetables includes melons. Processed includes seed and juices.

Note: Fiscal year trade value projections for total horticultural products are shown in table 37.